

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: October 3, 2005, 07:51:04 ; Search time 28 Seconds
(without alignments)
1412.325 Million cell updates/sec

Title: US-10-821-502-4
Perfect score: 2228
Sequence: 1 MDAALLSLLENANCSLALAE.....SIFSPTRISPHSIKQTAAY 411

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2228	100.0	411	2	A55610 corticotropin-rele
2	2026.5	91.0	431	2	I49149 CRF receptor - mou
3	2002.5	89.9	431	2	I49279 sauvagine/corticot
4	1999	89.7	430	2	A56726 corticoliberin rec
5	1569	70.4	415	2	S39535 corticotropin-rele
6	1561	70.1	415	2	I58144 corticotropin-rele
7	1550.5	69.6	444	2	A48260 corticoliberin rec
8	1430	64.2	375	2	I38879 corticotropin rele
9	619.5	27.8	515	2	A39286 parathyroid hormon
10	610.5	27.4	585	2	I49154 calcitonin recepto
11	609	27.3	478	2	A37430 calcitonin recepto
12	606.5	27.2	515	2	I60800 calcitonin recepto
13	605.5	27.2	479	2	S33746 calcitonin recepto
14	605	27.2	593	2	A49191 parathyroid hormon
15	595	26.7	591	2	S44203 parathyroid hormon
16	587	26.3	591	2	I54195 parathyroid hormon
17	573.5	25.7	482	2	A39285 calcitonin recepto
18	573	25.7	589	2	I59297 parathyroid hormon
19	571.5	25.7	449	2	S16319 secretin receptor
20	567.5	25.5	440	2	UC2532 secretin receptor
21	558	25.0	474	2	I37217 calcitonin recepto
22	555.5	24.9	498	2	I47130 calcitonin recepto
23	540	24.2	490	2	S34486 calcitonin recepto
24	540	24.2	550	2	A57519 parathyroid hormon
25	538.5	24.2	495	2	JC2195 vasoactive intesti
26	533.5	24.0	460	2	JC2194 vasoactive intesti
27	534	24.0	464	2	I60194 calcitonin-like re
28	528	23.7	459	2	JH0594 vasoactive intesti
29	521	23.4	461	2	JC2477 calcitonin recepto

30	515	23.1	485	2	JC4363 glucagon receptor
31	506	22.7	485	2	J01957 glucagon receptor
32	505.5	22.7	467	2	JN0616 pituitary adenylat
33	503.5	22.6	525	2	JN0902 pituitary adenylat
34	499.5	22.4	463	2	S71624 glucagon-like pept
35	494.5	22.2	463	2	I84494 glucagon-like pept
36	491	22.0	463	2	A46172 glucagon-like pept
37	489	21.9	513	2	S47631 pituitary adenylat
38	487.5	21.9	495	2	S36114 pituitary adenylat
39	487	21.9	466	2	S66676 glucase-dependent
40	486	21.8	477	2	JC2041 glucagon receptor
41	485.5	21.8	495	2	S39061 pituitary adenylat
42	485	21.8	466	2	G02234 gastric inhibitory
43	482	21.6	438	2	G02822 vasoactive intesti
44	473.5	21.3	523	2	S39060 pituitary adenylat
45	469.5	21.1	437	2	JU0185 PACAP/VIP receptor

ALIGNMENTS

RESULT 1

A55610
corticotropin-releasing factor receptor subtype 2 - rat
C/Species: Rattus norvegicus (Norway rat)
C/Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C/Accession: A55610
R/Lovendberg, T.W.; Liaw, C.W.; Grigoriadis, D.E.; Clevenger, W.; Chalmers, D.T.; De Sou
Proc. Natl. Acad. Sci. U.S.A. 92, 836-840, 1995
A/Title: Cloning and characterization of a functionally distinct corticotropin-releasin
A/Reference number: A55610; MUID:95148632; PMID:7846062
A/Accession: A55610
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: mRNA
A/Residues: 1-411 <LOV>
A/Cross-references: UNIPROT:P47866; EMBL:U16253; NID:G644771; PIDN:A652159.1; PID:G644
C/Genetics:
A/Gene: CRFR
C/Superfamily: glucagon receptor

Query Match	Best Local Similarity	100.0%;	Score 2228;	DB 2;	Length 411;
Matches	411;	Conservative	0;	Mismatches	0;
Indels	0;	Gaps	0;		
QY	1	MDAALLSLLENANCSLALAEELLDDGMBPPEBEGSYSCNTTLDQIGTCWPSARGALV	60		
DB	1	MDAALLSLLENANCSLALAEELLDDGMBPPEBEGSYSCNTTLDQIGTCWPSARGALV	60		
QY	61	ERRCPPEYFNGIKYNTTRNAVRECLENGTVASRIYNSHCEPIIDDKORKYDLHYRIALIN	120		
DB	61	ERRCPPEYFNGIKYNTTRNAVRECLENGTVASRIYNSHCEPIIDDKORKYDLHYRIALIN	120		
QY	121	YLGHCVSVALVAAPLLPLVLSIRCLRVNIHNNLTITFLRNITWFLQLIDHEVHEGN	180		
DB	121	YLGHCVSVALVAAPLLPLVLSIRCLRVNIHNNLTITFLRNITWFLQLIDHEVHEGN	180		
QY	181	EWRCRCVTITPNYFVVTNPFPMFVECCYLTATVMTYSIBHLKMLFLFGICIPRPIIV	240		
DB	181	EWRCRCVTITPNYFVVTNPFPMFVECCYLTATVMTYSIBHLKMLFLFGICIPRPIIV	240		
QY	241	ANAVGKLYENBECWFKGKPGDLVDYIYOGPIILVLLINFPVLFENIVRIIMTLRASTTS	300		
DB	241	ANAVGKLYENBECWFKGKPGDLVDYIYOGPIILVLLINFPVLFENIVRIIMTLRASTTS	300		
QY	301	ETIQYKAVKATLVLLPLGITMYLFFVNPGBDDLSQIVFIYNSFLQSGFGFVSVPYC	360		
DB	301	ETIQYKAVKATLVLLPLGITMYLFFVNPGBDDLSQIVFIYNSFLQSGFGFVSVPYC	360		
QY	361	FRNGEYRSALRRKRWQDHALLRVVARAMSIPSPTRISPHSIKQTAAY	411		
DB	361	FRNGEYRSALRRKRWQDHALLRVVARAMSIPSPTRISPHSIKQTAAY	411		

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RESULT 2
149149
CRF receptor - mouse
C:Species: Mus musculus (house mouse)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I49149
R:Petri, M.; Donaldson, C.; Chen, R.; Blount, A.; Berggren, T.; Bilezikjian, L.; Sawche
Proc. Natl. Acad. Sci. U.S.A. 92, 2969-2973, 1995
A:Title: Identification of a second corticotropin-releasing factor receptor gene and cha
A:Reference number: I49149; MUID:95224061; PMID:7708757
A:Accession: I49149
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-431 <RES>
A:Cross-references: UNIPROT:060748; EMBL:U17858; NID:g727254; P1DN:AAA68026.1; PID:g7272
C:Superfamily: glucagon receptor

Query Match      91.0%; Score 2026.5; DB 2; Length 431;
Best Local Similarity 87.9%; Pred. No. 6.4e-164;
Matches 376; Conservative 12; Mismatches 15; Indels 25; Gaps 2;

QY 3 AALLSLLEANCSLALAEELLIDGGEPPDPE-----GPYSYCNTT 43
Db 10 AQLLL-----CLFSLPLVLQVAGQAPQDPQPLMTLEOYCHRTTIGNFSGPYTCNTT 63
QY 44 LDQIGTCWPGAPGALVERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSCEPILD 103
Db 64 LDQIGTCWPGAPGALVERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSCEPILD 123
QY 104 DKORKYDHYRILALINVLGHCVSVVAALFPLVLRSLRCLANVHMLITFFILRN 163
Db 124 DKORKYDHYRILALINVLGHCVSVVAALFPLVLRSLRCLANVHMLITFFILRN 183
QY 164 ITWFLQLIDHEVHGENEWCRCVTTFINYPVVTNFMFMFVEGCYLHTAIWVTYSTEHLR 223
Db 184 IAWFLQLIDHEVHGENEWCRCVTTFINYPVVTNFMFMFVEGCYLHTAIWVTYSTEHLR 243
QY 224 KWLFLFGWCIPCPPIIIVAMAVGKLYENEGQCFGKEAGDLVDYIYQGFVMLVLINPVFL 283
Db 244 KWLFLFGWCIPCPPIIIVAMAVGKLYENEGQCFGKEAGDLVDYIYQGFVMLVLINPVFL 303
QY 244 FNIVAILMTKLRASITSETIOYRKAVKATVLLPLGITYMLFVNPGEDDLSQIVFIYF 343
Db 304 FNIVAILMTKLRASITSETIOYRKAVKATVLLPLGITYMLFVNPGEDDLSQIVFIYF 363
QY 344 NSFLOSFGQFVSVYCFEFGNEVSALRKRMHMODHMLRPVAVRAMSIPSPTRISFH 403
Db 364 NSFLOSFGQFVSVYCFEFGNEVSALRKRMHMODHMLRPVAVRAMSIPSPTRISFH 423
QY 404 SIKQTAAY 411
Db 424 SIKQTAAY 431

RESULT 3
149279
sauvagine/corticotropin-releasing factor receptor - mouse
C:Species: Mus musculus (house mouse)
C:Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C:Accession: I49279
R:Kishimoto, T.; Pearce, R.V.
Proc. Natl. Acad. Sci. U.S.A. 92, 1108-1112, 1995
A:Title: A sauvagine/corticotropin-releasing factor receptor expressed in heart and skel
A:Reference number: I49279; MUID:95166778; PMID:7755719
A:Accession: I49279
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-431 <KIS>
A:Cross-references: UNIPROT:060748; EMBL:U21729; NID:g717137; P1DN:AAC52174.1; PID:g7171
C:Superfamily: glucagon receptor

Query Match      89.9%; Score 2002.5; DB 2; Length 431;
Best Local Similarity 87.1%; Pred. No. 6.8e-162;
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Matches 373; Conservative 12; Mismatches 18; Indels 25; Gaps 2;

QY 3 AALLSLLEANCSLALAEELLIDGGEPPDPE-----GPYSYCNTT 43
Db 10 AQLLL-----CLFSLPLVLQVAGQAPQDPQPLMTLEOYCHRTTIGNFSGPYTCNTT 63
QY 44 LDQIGTCWPGAPGALVERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSCEPILD 103
Db 64 LDQIGTCWPGAPGALVERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSCEPILD 123
QY 104 DKORKYDHYRILALINVLGHCVSVVAALFPLVLRSLRCLANVHMLITFFILRN 163
Db 124 DKORKYDHYRILALINVLGHCVSVVAALFPLVLRSLRCLANVHMLITFFILRN 183
QY 164 ITWFLQLIDHEVHGENEWCRCVTTFINYPVVTNFMFMFVEGCYLHTAIWVTYSTEHLR 223
Db 184 IAWFLQLIDHEVHGENEWCRCVTTFINYPVVTNFMFMFVEGCYLHTAIWVTYSTEHLR 243
QY 224 KWLFLFGWCIPCPPIIIVAMAVGKLYENEGQCFGKEAGDLVDYIYQGFVMLVLINPVFL 283
Db 244 KWLFLFGWCIPCPPIIIVAMAVGKLYENEGQCFGKEAGDLVDYIYQGFVMLVLINPVFL 303
QY 244 FNIVAILMTKLRASITSETIOYRKAVKATVLLPLGITYMLFVNPGEDDLSQIVFIYF 343
Db 304 FNIVAILMTKLRASITSETIOYRKAVKATVLLPLGITYMLFVNPGEDDLSQIVFIYF 363
QY 344 NSFLOSFGQFVSVYCFEFGNEVSALRKRMHMODHMLRPVAVRAMSIPSPTRISFH 403
Db 364 NSFLOSFGQFVSVYCFEFGNEVSALRKRMHMODHMLRPVAVRAMSIPSPTRISFH 423
QY 404 SIKQTAAY 411
Db 424 SIKQTAAY 431

RESULT 4
A56726
corticoliberin receptor precursor, cardiac - mouse
C:Species: Mus musculus (house mouse)
C:Date: 21-Jul-1995 #sequence_revision 28-Jul-1995 #text_change 09-Jul-2004
C:Accession: A56726
R:Stenzel, P.; Kesteron, R.; Young, W.; Cone, R.D.; Rittenberg, M.B.; Stenzel-Poore, M.
Mol. Endocrinol. 9, 637-645, 1995
A:Title: Identification of a novel murine receptor for corticotropin-releasing hormone e
A:Reference number: A56726; MUID:96015396; PMID:7565810
A:Accession: A56726
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-430 <STE>
A:Cross-references: UNIPROT:060748; GB:U19939; NID:9806763; P1DN:AAC52243.1; PID:9806764
C:Superfamily: glucagon receptor
C:Keywords: cardiac muscle; heart

Query Match      89.7%; Score 1999; DB 2; Length 430;
Best Local Similarity 87.1%; Pred. No. 1.4e-161;
Matches 373; Conservative 12; Mismatches 17; Indels 26; Gaps 3;

QY 3 AALLSLLEANCSLALAEELLIDGGEPPDPE-----GPYSYCNTT 43
Db 10 AQLLL-----CLFSLPLVLQVAGQAPQDPQPLMTLEOYCHRTTIGNFSGPYTCNTT 63
QY 44 LDQIGTCWPGAPGALVERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSCEPILD 103
Db 64 LDQIGTCWPGAPGALVERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSCEPILD 123
QY 104 DKORKYDHYRILALINVLGHCVSVVAALFPLVLRSLRCLANVHMLITFFILRN 163
Db 124 DKORKYDHYRILALINVLGHCVSVVAALFPLVLRSLRCLANVHMLITFFILRN 182
QY 164 ITWFLQLIDHEVHGENEWCRCVTTFINYPVVTNFMFMFVEGCYLHTAIWVTYSTEHLR 223
Db 183 IAWFLQLIDHEVHGENEWCRCVTTFINYPVVTNFMFMFVEGCYLHTAIWVTYSTEHLR 242
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QY 224 KMFLFIGMCIPEPIIVAAVAGKLYENECQWFGKEPBGDLDVYIYOGPIILVLLINPVL 283
C/Accession: 158144
C/Species: Mus musculus (house mouse)
C/Date: 07-Oct-1994 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
C/Accession: S39535
R/Vita, N.; Laurent, P.; Lefort, S.; Chalou, P.; Lelias, J.M.; Kagnad, M.; le Fur, G.;
FEBs Letc. 335, 1-5, 1993
A/Title: Primary structure and functional expression of mouse pituitary and human brain
A/Reference number: S39534; PMID:94063063; PMID:8243652
A/Accession: S39535
A/Status: preliminary
A/Molecule type: mRNA
A/Residues: 1-415 <VIT>
A/Cross-references: UNIPROT:P35347; EMBL:X72305; NID:9436120; PIDN:CAA5105.1; PID:94361
A/Note: the sequence from Fig. 1 is inconsistent with that from Fig. 3 in having an addi
C/Superfamily: glucagon receptor
C/Keywords: G protein-coupled receptor; transmembrane protein

QY 284 FNIVRLMKLRASTSETIYQKAVKATVLLPLIGITMFLFVNPGEDLSQIVFIYF 343
Db 303 FNIVRLMKLRASTSETIYQKAVKATVLLPLIGITMFLFVNPGEDLSQIVFIYF 362
QY 344 NSFLOSGFVSFVFCFNGEVSALRKMRMODHMLRVVARAMSIPSPTRISFH 403
Db 363 NSFLOSGFVSFVFCFNGEVSALRKMRMODHMLRVVARAMSIPSPTRISFH 422

QY 404 SIKQTAAY 411
Db 423 SIKQTAAY 430

RESULT 5
corticotropin-releasing hormone receptor - mouse
C/Species: Mus musculus (house mouse)
C/Date: 07-Oct-1994 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
C/Accession: S39535
R/Vita, N.; Laurent, P.; Lefort, S.; Chalou, P.; Lelias, J.M.; Kagnad, M.; le Fur, G.;
FEBs Letc. 335, 1-5, 1993
A/Title: Primary structure and functional expression of mouse pituitary and human brain
A/Reference number: S39534; PMID:94063063; PMID:8243652
A/Accession: S39535
A/Status: preliminary
A/Molecule type: mRNA
A/Residues: 1-415 <VIT>
A/Cross-references: UNIPROT:P35347; EMBL:X72305; NID:9436120; PIDN:CAA5105.1; PID:94361
A/Note: the sequence from Fig. 1 is inconsistent with that from Fig. 3 in having an addi
C/Superfamily: glucagon receptor
C/Keywords: G protein-coupled receptor; transmembrane protein

Query Match 70.4%; Score 1569; DB 2; Length 415;
Best Local Similarity 69.4%; Pred. No. 3.4e-125;
Matches 290; Conservative 50; Mismatches 54; Indels 24; Gaps 5;

QY 4 ALLL-----SLLEANC-SLALAEELLDGMBEPPEPGYSYCNLTIDIGTCPOS 54
Db 12 ALLLLGLNPVSTSLDQOCESLSLASNV-----SGLCNVAVDLIGTCWPRS 58
QY 55 ARAVVERPCPEYENGKVTNNAYRECLNGTMASTRINYSCEPILDOKKRYDHYR 114
Db 59 PAQQLVVRPCPAFFYGVYNTNNGYRECLANGMAARVYSCQELINE-EKSKVHYH 117
QY 115 IALINVLGHCVSVLVAFLPLFLVLSIRCLRNVHMLITTFILRNITWFLDQ-ID 173
Db 118 IAVINVLGHCVSVLVAFLPLFLVLSIRCLRNVHMLITTFILRNITWFLDQ-ID 177
QY 174 HEVHEGNEVWCRCVTTFINFYVNTNPFWMFVEGCYLHTAIVMTSTELHKLWFLFIGWC 233
Db 178 PEHQGNVAMCRVLTAAYNVFHTNPFWMFVEGCYLHTAIVMTSTELHKLWFLFIGWC 237
QY 234 IPEPIIVAAVAGKLYENECQWFGKEPBGDLDVYIYOGPIILVLLINPVL 293
Db 238 VPEPIIVAAVAGKLYENECQWFGKEPBGDLDVYIYOGPIILVLLINPVL 297
QY 294 LRSTSETIYQKAVKATVLLPLIGITMFLFVNPGEDLSQIVFIYNSFLOSQFG 353
Db 298 LRSTSETIYQKAVKATVLLPLIGITMFLFVNPGEDLSQIVFIYNSFLOSQFG 357
QY 354 FVSVPFCFNGEVSALRKMRMODHMLRVVARAMSIPSPTRISFHSIKQTAAY 411
Db 358 FVSVPFCFNGEVSALRKMRMODHMLRVVARAMSIPSPTRISFHSIKQTAAY 415

RESULT 6
158144
corticotropin-releasing factor receptor - rat
C/Species: Rattus norvegicus (Norway rat)

C/Date: 26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change 09-Jul-2004
C/Accession: 158144
R/Chang, C.P.; Pearce, R.V.; O'Connell, S.; Rosenfeld, M.G.
Neuron 11, 1187-1195, 1993
A/Title: Identification of a seven transmembrane helix receptor for corticotropin-relea
A/Reference number: 158144; PMID:9409969; PMID:8274282
A/Accession: 158144
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: mRNA
A/Residues: 1-415 <RES>
A/Cross-references: UNIPROT:P35353; GB:I25438; NID:9450298; PIDN:AAA1644.1; PID:945761
C/Superfamily: glucagon receptor

Query Match 70.1%; Score 1561; DB 2; Length 415;
Best Local Similarity 74.3%; Pred. No. 1.6e-124;
Matches 277; Conservative 49; Mismatches 45; Indels 2; Gaps 2;

QY 40 CNTLDIGTCWPOSAPGALVERPCPEYENGKVTNNAYRECLNGTMASTRINYSHCE 99
Db 44 CNASVDLIGTCWPRSAPGOLVVRPCPAFFYGVYNTNNGYRECLANGMAARVYSECO 103
QY 100 PILDDOKRYDHYRITALLIINYLGHCVSVLVAFLPLFLVLSIRCLRNVHMLITTF 159
Db 104 EILNE-EKSKVHYHVAIINYLGHCVSVLVAFLPLFLVLSIRCLRNVHMLISAF 162
QY 160 ILRNITWFLDQ-IDHEVHEGNEVWCRCVTTFINFYVNTNPFWMFVEGCYLHTAIVMTYS 218
Db 163 ILRNITWFLDQ-IDHEVHEGNEVWCRCVTTFINFYVNTNPFWMFVEGCYLHTAIVMTYS 222
QY 219 TEHLRKLWFLFIGWCIPCEPIIVAAVAGKLYENECQWFGKEPBGDLDVYIYOGPIILV 278
Db 223 TDLRLKMFEMFCIGMGVFPPIVMAIGKLYENECQWFGKEPBGDLDVYIYOGPIILV 282
QY 279 NFPELNIYRIIMTKLRASSTSETIYQKAVKATVLLPLIGITMFLFVNPGEDLSQ 338
Db 283 NFPELNIYRIIMTKLRASSTSETIYQKAVKATVLLPLIGITMFLFVNPGEDLSQ 342
QY 339 VFIFYNSFLOSFGFVSFVFCFNGEVSALRKMRMODHMLRVVARAMSIPSPTR 398
Db 343 VFIFYNSFLOSFGFVSFVFCFNGEVSALRKMRMODHMLRVVARAMSIPSPTR 402
QY 399 RISFHSIKQTAAY 411
Db 403 RVSFHSIKQTAAY 415

RESULT 7
A48260
corticoliberin receptor, long splice form - human
N/Alternate names: corticoliberin binding protein; corticotropin releasing factor recep
C/Species: Homo sapiens (man)
C/Date: 31-May-1996 #sequence_revision 11-Apr-1997 #text_change 09-Jul-2004
C/Accession: 160975; A48260; S39534
R/Chen, R.; Lewis, K.A.; Perrin, M.H.; Vale, W.W.
Proc. Natl. Acad. Sci. U.S.A. 90, 8967-8971, 1993
A/Title: Expression cloning of a human corticotropin-releasing factor (CRF) receptor.
A/Reference number: A48260; PMID:94022256; PMID:7692441
A/Accession: 160975
A/Status: translated from GB/EMBL/DBJ
A/Molecule type: mRNA
A/Residues: 1-444 <RES>
A/Cross-references: UNIPROT:P34998; GB:I23333; NID:9408691; PIDN:AAA3719.1; PID:940869
A/Experimental source: Cushing corticotrophic cell tumor
A/Accession: A48260
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: mRNA
A/Residues: 1-145,175-444 <RES>
A/Cross-references: GB:I23332; NID:9408689; PIDN:AAA3718.1; PID:9408690
R/Vita, N.; Laurent, P.; Lefort, S.; Chalou, P.; Lelias, J.M.; Kagnad, M.; le Fur, G.;
FEBs Letc. 335, 1-5, 1993
A/Title: Primary structure and functional expression of mouse pituitary and human brain
A/Reference number: S39534; PMID:94063063; PMID:8243652
A/Accession: S39534

Db 453 YCFNGEYQAEIKKMSRW 471

RESULT 10

149154

calcitonin receptor 1b - mouse

C:Species: Mus musculus (house mouse)

C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004

C:Accession: 149154

R.Yamin, M.; Gorn, A.H.; Flannery, M.R.; Jenkins, N.A.; Gilbert, D.J.; Copeland, N.G.; T

Endocrinology 135, 2635-2643, 1994

A>Title: Cloning and characterization of a mouse brain calcitonin receptor complementary

A:Reference number: 149154; PMID:95080136; PMID:7988453

A:Accession: 149154

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-515 <RES>

A:Cross-references: UNIPROT:Q60755; EMBL:U18542; NID:g604510; PIDN:AAA69521.1; PID:g6045

C:Superfamily: glucagon receptor

Query Match 27.4%; Score 610.5; DB 2; Length 515;

Best Local Similarity 33.5%; Pred. No. 6.2e-44; Indels 67; Gaps 15;

Matches 140; Conservative 69; Mismatches 142; Indels 67; Gaps 15;

Qy 31 PDPEGYSYCNLTLDIGTCWPOSAPGALVERPCPEYFNIGIKYNTTRNAVRECLNGTW- 89

Db 63 PYEGEGLCNRTWGD-WMCWMDTPAGATAYGHCDDYFP--DFDTAEKSKYCDENGEWF 119

Qy 90 ----ASRI--NYSHCEPILDDK-QRKYDLYRIALINYLGCVSVALVAFLFLVLR 142

Db 120 RHPDSNRTWSNVTLCNAFTSEKLNQNAVYLVY--LALV---GHSLSIALVAASMLIFWIFK 174

Qy 143 SIRCLANVHNMNLTFFILNITWFLQID-----HEVHSGNEVW----- 183

Db 175 NISQQRVTLLKNNFLTYILNSII-IIHIVEVVPNGDLVRDPMHIFHNHTMTQMOMEL 233

Qy 184 -----CRVTTIFNFVVTNFMFMVEGCVLHTAIVMTYSTER 221

Db 234 SPPLPLCAHEGKMDPHASEVISCKVHLFQWVMSCNFMFLGEGYILHTLIMAVFTDE 293

Qy 222 LR-KMLFLFTIGCIPCPPIIVAAVGLKYENECQFGEKDEGLVDYIYOGPIILVLLNF 280

Db 294 QRLRWYLL-LGWGFPVPTPIIHAITRALYNDNCWLSAETHLL--YIHGPVAVVALVVPF 350

Qy 281 VFLENIVRIIMTKLRSTSETIQYKAVKATLVLLPLGITMFLFVVPNGEDDLSQIVF 340

Db 351 FFLNLTIVRLVLTVMKROTHEAESYMYLKAVALVAVLVLGTFVFPWPRSNKVLCKI-Y 409

Qy 341 IFENSFLQSGFGEVVFYCFNGEVSALRKRMH-----RWQDHHLRVVVARAMSIP 394

Db 410 DYLMHSLHFQGFVAITYCFCHNEVQVTLKRWMTQPKIQMSQMRKRRRTNRVVSAP 467

RESULT 11

A37430

calcitonin receptor - rat

C:Species: Rattus norvegicus (Norway rat)

C>Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 24-Nov-1999

C:Accession: A37430

R:Sexton, P.M.; Housam, S.; Hilton, J.M.; O'Keefe, L.M.; Center, R.J.; Gillespie, M.T

Mol. Endocrinol. 7, 815-821, 1993

A>Title: Identification of brain isoforms of the rat calcitonin receptor.

A:Reference number: A37430; PMID:93368608; PMID:8395656

A:Accession: A37430

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-478 <RES>

A:Cross-references: GB:L13041; NID:g294530; PIDN:AAA03030.1; PID:g294531

C:Superfamily: glucagon receptor

Query Match 27.3%; Score 609; DB 2; Length 478;

Best Local Similarity 35.8%; Pred. No. 7.7e-44;

Matches 138; Conservative 67; Mismatches 142; Indels 38; Gaps 14;

Qy 30 PDPEGYSYCNLTLDIGTCWPOSAPGALVERPCPEYFNIGIKYNTTRNAVRECLNGTW 89

Db 64 PYEGEGP--YCNRTWGD-WMCWMDTPAGATAYGHCDDYFP--DFDTEKSKYCDENGEWF 118

Qy 90 ----ASRI--NYSHCEPILDDKQKRYDLYRIALINYLGCVSVALVAFLFLVLR 142

Db 119 FRHPDSNRTWSNVTLCNAFTPDKLNAAVSYVALV----GHSMSIALIASMGIFLFFK 174

Qy 143 SIRCLANVHNMNLTFFILNITWFLQID-----HEVHSGNVCRCVTTINNYFVNT 198

Db 175 NISQQRVTLLKNNFLTYILNSII-IIHIVEVVPNGDLVRDPMHIFHNHTMTQMOMEL 233

Qy 199 FFMFVEGCVLHTAIVMTYSTER-LR-KMLFLFTIGCIPCPPIIVAAVGLKYENECQFGE 257

Db 234 YFMMLCEGIYILHTLIMAVFTEDQRLRWYLL-LGWGFPVPTPIIHAITRAVYNDNCWLS 292

Qy 258 KEEGDLVDYIYOGPIILVLLNFVLENIVRIIMTKLRSTSETIQYKAVKATLVLLP 317

Db 293 TETHLL--YIHGPVAVVALVVPFLLNITVRLVLTVMKROTHEAEAVMYLKAVALVAVLP 350

Qy 318 LGITMFLFVVPNGEDDLSQIVFYFNSFLQSGFGEVVFYCFNGEVSALRKRMH--- 374

Db 351 LGIQFVFPWPRSNKVLCKI-YDYLHSLHFQGFVAITYCFCHNEVQVTLKRWMAQF 409

Qy 375 ----HRMODHHLRVVVARAMSIP 394

Db 410 KIOMSHRW----GRRPRTNRVVSAP 430

RESULT 12

160800

calcitonin receptor clb precursor - rat

C:Species: Rattus norvegicus (Norway rat)

C>Date: 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change 09-Jul-2004

C:Accession: 160800; S33747

R:Sexton, P.M.; Housam, S.; Hilton, J.M.; O'Keefe, L.M.; Center, R.J.; Gillespie, M.

Mol. Endocrinol. 7, 815-821, 1993

A>Title: Identification of brain isoforms of the rat calcitonin receptor.

A:Reference number: A37430; PMID:93368608; PMID:8395656

A:Accession: 160800

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-515 <RES>

A:Cross-references: UNIPROT:P32214; GB:L13040; NID:g294532; PIDN:AAA03031.1; PID:g29453

R:Albrand, K.; Mull, E.; Brady, E.M.G.; Herich, J.; Moore, C.X.; Beaumont, K.

FEBS Lett. 325, 225-232, 1993

A>Title: Molecular cloning of two receptors from rat brain with high affinity for salmon

A:Reference number: S33746; PMID:93307500; PMID:8391477

A:Accession: S33747

A:Molecule type: mRNA

A:Residues: 1-147, 'L', 149-458, 'R', 459-477, 'L', 479-515 <ALB>

A:Cross-references: GB:L14618; NID:g347431; PIDN:AAA65965.1; PID:g347432

C:Superfamily: glucagon receptor

C:Keywords: G protein-coupled receptor; transmembrane protein

Query Match 27.2%; Score 606.5; DB 2; Length 515;

Best Local Similarity 34.2%; Pred. No. 1.4e-43; Indels 73; Gaps 15;

Qy 30 PDPEGYSYCNLTLDIGTCWPOSAPGALVERPCPEYFNIGIKYNTTRNAVRECLNGTW 89

Db 64 PYEGEGP--YCNRTWGD-WMCWMDTPAGATAYGHCDDYFP--DFDTEKSKYCDENGEWF 118

Qy 90 ----ASRI--NYSHCEPILDDKQKRYDLYRIALINYLGCVSVALVAFLFLVLR 142

Db 119 FRHPDSNRTWSNVTLCNAFTPDKLNAAVSYVALV----GHSMSIALIASMGIFLFFK 174

Qy 143 SIRCLANVHNMNLTFFILNITWFLQID-----HEVHSGNVCRCVTTINNYFVNT 198

Db 175 NISQQRVTLLKNNFLTYILNSII-IIHIVEVVPNGDLVRDPMHIFHNHTMTQMOMEL 234

169 --LQIDHE---VHEGNEVWCRCVTTIFNFVVTNPFWMFVEGCVLTALVTSTHLL 222
Db PPLPSAHEGMDPDHSEVISCILHFFQYMMACNYFEMLCCEGIYHLLIYMAVFTEQ 294
Qy 223 R-KMFLFTGMCIPCPPIIVAMAVGLKYENECWCGKEGDLVDYIYOGPIIIVLLIN 281
Db 295 RLRMYLL-LGWGEPPIVPTIIHAIITAVVNDNCWISTEHL--YIHGPVAAALVNF 351
Qy 282 FLEFNIRILMTLRASTSETIYRKRAVATVLLPLGITYMLFFVNGEDDLSQIVFI 341
Db 352 FLINIVRVLVTKMGTHEAEAMYLKAVATVIVPLGIGVFVFPWRPSNKVLGKI-YD 410
Qy 342 YFNSTLQSFQFPFVFCFNGEVSALRKFW-----HRQDHALRVVAPAMSI 393
Db 411 YLMSHLIHQGFVAVATYICFNHEVQVTLKQMAQFKIQMSHRW-----GRRPPTRVVSA 466
Qy 394 P 394
Db 467 P 467

RESULT 13

S33746
calcitonin receptor c1a precursor - rat
CSpecies: Rattus norvegicus (Norway rat)
CDate: 02-Dec-1993 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
CAccession: S33746
RAlbrandt, K.; Mull, E.; Brady, E.M.G.; Herich, J.; Moore, C.X.; Beaumont, K.
FEBS Lett. 325, 225-232, 1993
A>Title: Molecular cloning of two receptors from rat brain with high affinity for salmon
A.Reference number: S33746; MUID:93307500; PMID:8391477
A.Accession: S33746
A.Molecule type: mRNA
A.Residues: 1-479 <ALB>
A.Cross-references: UNIPROT:332214; GB:U14617; NID:9347429; PIDN:AAA55964.1; PID:9347430
C:Superfamily: glucagon receptor
C:Keywords: transmembrane protein

Query Match 27.2%; Score 605.5; DB 2; Length 479;
Best Local Similarity 35.8%; Pred. No. 1.5e-43;
Matches 138; Conservative 67; Mismatches 143; Indels 37; Gaps 14;
Qy 30 PDPGPGSYCNTLLDQIGTWPQASGALVERPCPEYFGIKYTNNAVRECLNGTW 89
Db 64 PYEGEGP--YCNRTWDG--WMCWDDTPAGVMSYQHCPDYRP--DFPTEKVSXKCBENGW 118
Qy 90 ----ASRT--NYSHCERTLDDKQKRYDLHYRIALLINLVGHCVSVAALVAFLFLVLR 142
Db 119 FRHDSNRKWSVYTLQNAFTPDKLHNAVLYLALV---GHSMSIALIASMGIPLFEK 174
Qy 143 SIRCLRNVHMLITTFILRNITWFLQID---HEVHEGNEVWCRCVTTIFNFVVTN 198
Db 175 NLSQGRVTLHKRMFLTYIINSII--IIHLVEVVRNGDLVRPDISCKILHFFHQYMMACN 233
Qy 199 FWMFVEGCVLTALVTSTHLLR-KMFLFTGMCIPCPPIIVAMAVGLKYENECWCG 257
Db 234 YFMMLCCEGIYHLLIYMAVFTEQRLRWYLL-LGWGEPPIVPTIIHAIITAVVNDNCWLS 292
Qy 258 KEPGDLVDYIYOGPIIIVLLINFLVFNIVRLIMTKLRASTSETIYRKAVKATLVLP 317
Db 293 TETHLL--YIHGPVAAALVNFVFLNIVRLVTKMGTHEAEAMYLKAVATVIVPL 350
Qy 318 ILGITYMLFFVNGEDDLSQIVFIYFNSTLQSFQFPFVFCFNGEVSALRKFW--- 374
Db 351 ILGIGVFVFPWRPSNKVLGKI-YDYLMSHLIHQGFVAVATYICFNHEVQVTLKQMAQF 409
Qy 375 ----HRQDHALRVVAPAMSI 394
Db 410 KIQMSHRWGR---RPTRVVVSAP 431

RESULT 14

A49191

parathyroid hormone/PTH-related peptide receptor - human
N/Alternate names: parathyroid hormone/parathyroid hormone related peptide receptor
C/Species: Homo sapiens (man)
CDate: 19-Dec-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
CAccession: J38139; A49191; J38113; G01562; S29610
R.Schupani, E.; Weinstein, L.S.; Bergwitz, C.; Jida-Klein, A.; Kong, X.F.; Stuhmann, M.
Kronenberg, H.M.; Abou-Samra, A.B.; Segre, G.V.; Uneyhner, H.
J. Clin. Endocrinol. Metab. 80, 1611-1621, 1995
A>Title: Pseudohypoparathyroidism type 1b is not caused by mutations in the coding exons
A.Reference number: J38139; MUID:95263723; PMID:7745008
A.Accession: J38139
A>Status: translated from GB/EMBL/DBJ
A.Molecule type: DNA
A.Residues: 1-593 <RES>
A.Cross-references: UNIPROT:Q03431; EMBL:U22409; NID:9897594; PIDN:AA60657.1; PID:98975
R.Schupani, E.; Karga, H.; Karaplis, A.C.; Potts Jr., J.T.; Kronenberg, H.M.; Segre, G.V.
Endocrinology 132, 2157-2165, 1993
A>Title: Identical complementary deoxyribonucleic acids encode a human renal and bone pa
A.Reference number: A49191; MUID:93238641; PMID:8386612
A.Accession: A49191
A.Status: preliminary
A.Molecule type: mRNA
A.Residues: 1-593 <SCH>
A.Cross-references: GB:U04308; NID:9190721; PIDN:AAA36525.1; PID:9190722
A>Note: sequence extracted from NCBI backbone (NCBI:130233, NCBI:130234)
R.Schneider, H.; Feyen, J.H.; Seuwen, K.; Movva, N.R.
Eur. J. Pharmacol. 246, 149-155, 1993
A>Title: Cloning and functional expression of a human parathyroid hormone receptor.
A.Reference number: J38113; MUID:93387403; PMID:8397094
A.Accession: J38113
A>Status: preliminary
A.Molecule type: mRNA
A.Residues: 1-593 <RES>
A.Cross-references: EMBL:X68596; NID:9396812; PIDN:CAA8589.1; PID:9396813
R.Levine, M.
submitted to the EMBL Data Library, November 1994
A.Reference number: G07787
A.Accession: G01562
A>Status: translated from GB/EMBL/DBJ
A.Molecule type: mRNA
A.Residues: 1-593 <LEV>
A.Cross-references: EMBL:U17418; NID:9596129; PIDN:AAA56774.1; PID:9596130
C/Genetics:
A.Introns: 25/3; 60/1; 105/1; 142/1; 181/3; 213/2; 278/3; 330/1; 350/2; 372/3; 404/2; 45
C:Superfamily: glucagon receptor
C:Keywords: G protein-coupled receptor; transmembrane protein

Query Match 27.2%; Score 605; DB 2; Length 593;
Best Local Similarity 31.7%; Pred. No. 2.1e-43;
Matches 142; Conservative 67; Mismatches 153; Indels 86; Gaps 15;
Qy 6 LLSLEANCSTLALAEI-----LSD-----GW-----GEP-----PDEGKY 37
Db 40 LIHRAQOCERKRLKVLDRPASIMSDGKWSASISGPRKDKASGKLYPSESEKAPT 99
Qy 38 SY-----CNTLLDQIGTWPQASGALVERPCPEYFGIKYTNNAVRECLNGTW-- 89
Db 100 GSRYRGRCPLPEWDHI--LCWPLGAGVAVVAPCPYI--YDNNHKGHAHYRRDRNGSWEL 156
Qy 90 ----ASRINSHCEPIIIDDKQKRYDLHYRIALLINLVGHCVSVAALVAFLFLVLSI 144
Db 157 VPGHNRWANYSECYKFLNETREVERPDRIGIMVT--VGYSVSLASLTVAVLILVYFRRL 215
Qy 145 RCLRNVHMLITTFILRNITWFL-----QIDHEVH-----E 178
Db 216 HCTRNVIHMLFLSFLMLAVSIFVQDAVLVSGATLDEARLIEELRALIAQAPPPATVA 275
Qy 179 GNEVWCRCVTTIFNFVVTNPFWMFVEGCVLTALVTSTHLLRKMFLFTGMCIPCP 238
Db 276 AGYACGRVAVTFELFLATNTYMIWVEGLYHLSLFMAFPSEKRYLWGTFTVGWGLPAVF 335
Qy 239 IVAMAVGLKYENECWCGKEPGDLVD---YIYOGPIIIVLLINFLVFNIVRLIMTKL 294

```

Db      336 VAVWVSVATLTATNGCM-----DLSGNKKWIIQVPIIASIVLFIPIINIVRATKL 389
Qy      295 R---ASTSETIQYRKAVKATILVLPILGITVWLFPVNPEDDLSQ--VEIENSTLOS 349
Db      330 RETNAGRCRDTRQOYKRLKLTSLVLMFLFGVHIYVFATPIYTESGLIMOVQMTIELFNS 449
Qy      350 FQGFVSVVYFCFNGEYVRSALKRRHWR 377
Db      450 FQGFVALLVYCFNGEYVQAEIKKSSWR 477

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RESULT 15

parathyroid hormone-related peptide receptor - mouse
C:Species: Mus musculus (house mouse)
C:Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004
C:Accession: S44203
R:Karpertien, M.; van Dijk, T.B.; Hoelmakers, T.; Cremers, F.; Abou-Samra, A.B.; Boonstra submitted to the EMBL Data Library, April 1994
A:Description: Expression pattern of parathyroid hormone/parathyroid hormone related peptide
A:Reference number: S44203
A:Accession: S44203
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-591 <KAR>
A:Cross-references: UNIPROT:P41593; EMBL:X78936; NID:g474828; PIDN:CAAS5536.1; PID:g474828
C:Superfamily: glucagon receptor

Query Match	26.7%	Score	595;	DB 2;	length	591;
Best Local Similarity	30.6%	Pred	No.1.5e-42;			
Matches 137;	Conservative	73;	Mismatches	152;	Indels	86;
					Gaps	14;

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QY 6 LLSLLEANCSSLALAEEL-----LLD-----GM-----GEPDPGPGYSY-----39
Db 40 LLHRQAQCDKLLKVELHTLAANIMEDKXMTASTSGKPEKCAKPKFYESKENDVPT 99
QY 40 -----CNTLLDOIQTWCPOSAPGALVERPCBEYFNGIKYTNTRNAVRECLNGTW-- 89
Db 100 GSRRRGRPCLPFEMDNI--VCMPLGAPBEVAVAVPCPDYI--YDFNHKHGAAYRCDRNGSWEV 156
QY 90 -----ASPRINYSCEBIIDDKOKKYDIAHRIALINYLGHCSVVALVAFLEFLVLRST 144
Db 157 VPGHNRTMANVSECLKFMETNETREKREVPDRLGMIYI-VGISMSLASTYAVVLITLAYFRL 215
QY 145 RCLRVNIHNNLTITTFILRNITWFL-----OLDHEVHEGNEV-----182
Db 216 HCTRNYIHHMFLSFNLRASAISFYKQAVLYSGFTLDEABERLTBEELHIIAQVPRPPAAA 275
QY 183 ----WCRCTTTFNNFVTVNFFMMFPEGCYLTAIYMTYSTELRKMLFLFTMGICPCPI 238
Db 276 VGACGCRVAVTFEFLYFLATNYYWIIIEGLYHLSHIMAFSEKKYLMGFTIFPGMGPAVF 359
QY 219 IVAMAVGKLYENECQWCFKEBQDLDV-----YVQGPITLVLINFLFENIYRILMTKL 294
Db 336 VAWMGVATLATLNTGCM-----DLSSGHKKWIIQVPIIASVAVNLFLFINIIRVLATKL 389
QY 295 R---ASTSETIOYRKAVALVLELLGITYMLFVNVPEDDLDSOI--VFIYNSFLQS 349
Db 390 *ETNAGRCDDTQOYRKLTSLTIVLVPFLGVHYHTVFMALPYTEVSGTLMQIQMHYEMLFS 449
QY 350 FQGFVSVFYCFPNEGVEVRSALRKRMWRM 377
Db 450 FQGFVAIIYCFPCNBEVQAEIRKSMWRM 477

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Search completed: October 3, 2005, 07:58:23
Job time : 29 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: October 3, 2005, 07:50:44 ; Search time 100 Seconds

(without alignments)
2104.645 Million cell updates/sec

Title: US-10-821-502-4

Perfect score: 2228

Sequence: 1 MDAALLSLLEANCSIALAE.....SIFTSPTRIHSIKQTAIV 411

Scoring table: BLOSUM62

Searched: 1612378 seqs, 512079187 residues

Total number of hits satisfying chosen parameters: 1612378

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database: 1: uniprot_03:*

2: uniprot_sprot:*

3: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2228	100.0	411	1	CRF2_RAT
2	2111	94.7	411	1	CRF2_HUMAN
3	2105.5	94.5	410	2	Q8WML9
4	2026.5	91.0	431	1	CRF2_MOUSE
5	1967.5	88.3	437	2	Q8WML8
6	1836.5	82.4	412	2	Q72222
7	1793	80.5	413	1	CRF2_XENLA
8	1787.5	80.2	411	2	Q68Y60
9	1787	80.2	405	2	Q68Y60
10	1780.5	79.9	414	2	Q8AWA1
11	1593	71.5	420	1	CRF1_CHICK
12	1574	70.6	415	2	Q76LH8
13	1573	70.6	415	2	Q8K3R2
14	1569.5	70.4	415	2	Q8WMM0
15	1569	70.4	415	1	CRF1_MOUSE
16	1563	70.2	415	2	Q9BGU4
17	1562	70.1	445	2	Q9BUC2
18	1561	70.1	415	1	CRF1_RAT
19	1561	70.1	430	2	Q8AWA2
20	1560.5	70.0	415	1	CRF1_XENLA
21	1555.5	69.8	447	2	Q8NG71
22	1550.5	69.6	444	1	CRF1_HUMAN
23	1550	69.6	428	2	Q9BUC0
24	1546	69.4	434	2	Q7T3S9
25	1536	68.9	415	1	CRF1_SHEEP
26	1521.5	68.3	416	2	Q68Y61
27	1402	62.9	329	2	Q70JY6
28	1095	49.1	277	2	Q8BJD9
29	836	37.5	154	2	Q7TSA2
30	787	35.3	188	2	Q7TSA1
31	724	32.5	441	1	DIHR_ACHDO

32	697	31.3	504	2	Q9V716	Q9V716 drosophila
33	684	30.7	388	2	Q9V6C7	Q9V6C7 drosophila
34	662.5	29.7	465	2	Q70773	Q70773 anopheles g
35	661	29.7	641	2	Q65AS2	Q65AS2 nilaparvata
36	658.5	29.6	631	2	Q65AS3	Q65AS3 nilaparvata
37	613.5	27.5	585	1	PTRR_DIDMA	P25107 didelphis m
38	611	27.4	478	2	Q924D5	Q924D5 mus musculus
39	611	27.4	495	2	Q924D6	Q924D6 mus musculus
40	610.5	27.4	515	1	CALR_MOUSE	Q60755 mus musculus
41	610.5	27.4	532	2	Q924D7	Q924D7 mus musculus
42	609.5	27.4	585	1	PTRR_PIG	P50133 sus scrofa
43	605	27.2	593	1	PTRR_HUMAN	Q03431 homo sapien
44	604.5	27.1	589	2	Q7YR13	Q7YR13 cervus elap
45	603	27.1	516	1	CALR_RAT	P32214 rattus norv

ALIGNMENTS

```

RESULT 1
CRF2_RAT
ID P47866; STANDARD; PRT; 411 AA.
AC P47866;
DT 01-FEB-1996 (Rel. 33, Created)
DT 01-FEB-1996 (Rel. 33, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Corticotropin releasing factor receptor 2 precursor (CRF-R 2) (CRF2)
DE (Corticotropin-releasing hormone receptor 2) (CRH-R 2).
GN Name=Crt2r; Synonym=Crt2r;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Sprague-Dawley; TISSUE=Hypothalamus, and lung;
RX MEDLINE=95148632; PubMed=7846062;
RA Lovenberg T.W., Liaw C.W., Grigoriadis D.E., Clevenger W.,
RA Chalmers D.T., de Souza E.B., Oltersdorf T.;
RT "Cloning and characterization of a functionally distinct
RT corticotropin-releasing factor receptor subtype from rat brain."
RT Proc. Natl. Acad. Sci. U.S.A. 92:836-840(1995).
RN [2]
RP ERRATUM.
RA Lovenberg T.W., Liaw C.W., Grigoriadis D.E., Clevenger W.,
RA Chalmers D.T., de Souza E.B., Oltersdorf T.;
RL Proc. Natl. Acad. Sci. U.S.A. 92:5759-5759(1995).
CC -1- FUNCTION: This is a receptor for corticotropin releasing factor.
CC Shows high-affinity CRF binding. Also binds to urocortin I, II and
CC III. The activity of this receptor is mediated by G proteins which
CC activate adenyl cyclase.
CC -1- SUBCELLULAR LOCATION: Integral membrane protein.
CC -1- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=2;
CC Name=CRF2-alpha;
CC IsoId=P47866-1; Sequence=Displayed;
CC Note=Major isoform;
CC Name=CRF2-beta;
CC IsoId=P47866-2; Sequence=VSP_002001;
CC -1- TISSUE SPECIFICITY: Predominantly expressed in limbic regions of
CC the brain such as the lateral septum, the entorhinal cortex, the
CC hypothalamic ventromedial nucleus and several amygdaloid nuclei.
CC Also detectable in lung, kidney and heart.
CC -1- SIMILARITY: Belongs to the G-protein coupled receptor 2 family.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).

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DR EMBL; U16253; AAC52159.1; -.
 DR PIR; A55610; A55610.
 DR RCD; 70547; Chn2.
 DR InterPro; IPR000832; GPCR_secretin.
 DR InterPro; IPR001879; hormn_receptor.
 DR Pfam; PF00002; 7tm_2; 1.
 DR Pfam; PF02793; HRM; 1.
 DR PRINTS; PR00249; GPCRSECRETIN.
 DR SMART; SM00008; Hornr; 1.
 DR PROSITE; PS00649; G_PROTEIN_RECP_F2_1; 1.
 DR PROSITE; PS00650; G_PROTEIN_RECP_F2_2; 1.
 DR PROSITE; PS00227; G_PROTEIN_RECP_F2_3; 1.
 DR PROSITE; PS0261; G_PROTEIN_RECP_F2_4; 1.
 DR Alternative splicing; G-protein coupled receptor; Glycoprotein;
 KW Signal, Transmembrane.
 FT SIGNAL 1 17 Potential.
 FT CHAIN 18 411 Corticotropin releasing factor receptor
 FT DOMAIN 18 118 Extracellular (Potential).
 FT TRANSMEM 119 139 1 (Potential).
 FT DOMAIN 140 148 Cytoplasmic (Potential).
 FT TRANSMEM 149 168 2 (Potential).
 FT DOMAIN 169 185 Extracellular (Potential).
 FT TRANSMEM 186 209 3 (Potential).
 FT DOMAIN 210 223 Cytoplasmic (Potential).
 FT TRANSMEM 224 245 4 (Potential).
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 FT TRANSMEM 346 365 7 (Potential).
 FT DOMAIN 366 411 Cytoplasmic (Potential).
 FT CARBOHYD 41 41 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 74 74 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 86 86 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 94 94 N-linked (GlcNAc...) (Potential).
 FT VARSPLIC 1 34 MDAALLSLLEANCSLALAEELLDDGWPPEPPEPSYCNLTLDQIGCWQSAAGALV
 PSLPSAQLCLCTVSLPLPLQVAPGRPLQDQPLTWLLEQY
 CHRTTRNPS (in isoform CRF2-beta).
 /FTID=VSP_002001.
 SQ SEQUENCE 411 AA; 47706 MW; 1CEB8501BC94469 CR64;
 Query Match 100.0%; Score 2228; DB 1; Length 411;
 Best Local Similarity 100.0%; Pred. No. 1.7e-159;
 Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 361 PFNGSVRSALRRKRWODHHLRVVARAMSIFTSPTIRISFHSIKOTAAV 411
 RESULT 2
 CRF2_HUMAN STANDARD; PRT; 411 AA.
 ID CRF2_HUMAN Q13324; Q13461; Q99431;
 AC 01-NOV-1997 (Rel. 35, Created)
 DT 30-MAY-2000 (Rel. 39, Last sequence update)
 DT 25-OCT-2004 (Rel. 45, Last annotation update)
 DE Corticotropin releasing factor receptor 2 precursor (CRF-R 2) (CRF2)
 DE (Corticotropin-releasing hormone receptor 2) (CRH-R 2).
 GN Name=CRF2; Synonyms=CRF2R, CRH2R.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 NCBI_TaxID=9606;
 [1]
 RN SEQUENCE FROM N.A. (ISOFORM CRF2-ALPHA).
 RX MEDLINE=96107120; PubMed=8536644; DOI=10.1210/en.137.1.72;
 RA Liaw C.W., Lovenberg T.W., Barry G., Oltersdorf T., Grisoriadis D.E.,
 RA de Souza E.B.;
 RT "Cloning and characterization of the human corticotropin-releasing
 RT factor-2 receptor complementary deoxyribonucleic acid";
 RL Endocrinology 137:72-77(1996).
 [2]
 RN SEQUENCE FROM N.A. (ISOFORM CRF2-BETA).
 RC TISSUE=Amygdala;
 RA Kostich W.A., Chen A., Sperle K., Horlick R.A., Patterson J.,
 RA Hyde T.W., Largent B.L.;
 RT "Molecular cloning of the human CRH2B receptor isoform: divergence
 RT from the rodent isoform in sequence and expression pattern";
 RL Submitted (JUN-1997) to the EMBL/Genbank/DBJ databases.
 [3]
 RN SEQUENCE FROM N.A. (ISOFORM CRF2-GAMMA).
 RC TISSUE=Amygdala;
 RX MEDLINE=96381934; PubMed=9717834; DOI=10.1210/me.12.8.1077;
 RA Kostich W.A., Chen A., Sperle K., Largent B.L.;
 RT "Molecular identification and analysis of a novel human corticotropin-
 RT releasing factor (CRF) receptor: the CRF2gamma receptor";
 RL Mol. Endocrinol. 12:1077-1085(1998).
 [4]
 RN SEQUENCE FROM N.A. (ISOFORMS CRF2-ALPHA AND CRF2-GAMMA).
 RA Andrews S., Langston Y., Stoneking T., Maupin R.;
 RL Submitted (JUN-1998) to the EMBL/Genbank/DBJ databases.
 [5]
 RN SEQUENCE FROM N.A. (ISOFORM CRF2-ALPHA).
 RA Suwa M., Sato T., Okouchi I., Arita M., Futami K., Matsumoto S.,
 RA Tsutsuni S., Aburatani H., Asai K., Akiyama Y.;
 RT "Genome-wide discovery and analysis of human seven transmembrane helix
 RT receptor genes";
 RL Submitted (JUL-2001) to the EMBL/Genbank/DBJ databases.
 [6]
 RN SEQUENCE OF 1-88 FROM N.A. (ISOFORM CRF2-BETA).
 RC TISSUE=Skeletal muscle;
 RX MEDLINE=97342544; PubMed=9199241; DOI=10.1016/S0167-4781(97)00047-X;
 RA Valdenaire O., Giller T., Breu V., Gottcwick J., Kilpatrick G.;
 RT "A new functional isoform of the human CRF2 receptor for
 RT corticotropin-releasing factor";
 RL Biochim. Biophys. Acta 1352:129-132(1997).
 CC -!- FUNCTION: This is a receptor for corticotropin releasing factor.
 CC Shows high-affinity CRF binding. Also binds to urocortin I, II and
 CC III. The activity of this receptor is mediated by G proteins which
 CC activate adenylyl cyclase.
 CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
 CC -!- ALTERNATIVE PRODUCTS: Integral membrane protein.
 CC Event=Alternative splicing; Named isoforms=3;
 CC Name=CRF2-alpha;
 CC IsoId=Q13324-1; Sequence=Displayed;
 CC Name=CRF2-beta;
 CC IsoId=Q13324-2; Sequence=VSP_001999;
 CC Name=CRF2-gamma;
 CC IsoId=Q13324-3; Sequence=VSP_002000;

QY 1 MDALLSLLEANCSLALAEELLIDGWEPPDPGPGSYCNTTLDQIGTCWPGASGALV 60
Cc 1 SUBCELLULAR LOCATION: Integral membrane protein.
Cc -1 TISSUE SPECIFICITY: Highly expressed in the heart. Also expressed
Cc in lungs, skeletal muscle, gastrointestinal tract, epididymis, and
Cc brain.
Cc -1 SIMILARITY: Belongs to the G-protein coupled receptor 2 family.
Cc
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Cc
Cc EMBL, U17658; AAA68026.1; -.
Cc EMBL, U21729; AAC52174.1; -.
Cc EMBL, U19939; AAC52243.1; -.
Cc PIR, A56726; A56726.
Cc PIR, A49149; A49149.
Cc PIR, I49279; I49279.
Cc MGI: 694312; Ctnr2.
Cc GO: 0015056; F: corticotrophin-releasing factor receptor ac. .; IDA.
Cc GO: 0016525; P: negative regulation of angiogenesis; IMP.
Cc InterPro: IPR00832; GPCR_secretin.
Cc Pfam: PF00002; 7tm_2; 1.
Cc Pfam: PF02793; HRM; 1.
Cc PRINTS: PR00249; GPCRSECRETIN.
Cc SMART, SM00008; HormR, 1.1; PROTEIN RECF_P2_1; 1.
Cc PROSITE, PS00649; G_PROTEIN RECF_P2_2; 1.
Cc PROSITE, PS00650; G_PROTEIN RECF_P2_3; 1.
Cc PROSITE, PS50227; G_PROTEIN RECF_P2_4; 1.
Cc PROSITE, PS50261; G_PROTEIN RECF_P2_5; 1.
Cc G-protein coupled receptor; Glycoprotein; Signal; Transmembrane.
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Cc FT 13221 13240
Cc FT 13241 13260
Cc FT 13261 13280
Cc FT 13281 13300
Cc FT 13301 13320
Cc FT 13321 13340
Cc FT 13341 13360
Cc FT 13361 13380
Cc FT 13381 13400
Cc FT 13401 13420
Cc FT 13421 13440
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Cc FT 13461 13480
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Cc FT 13581 13600
Cc FT 13601 13620
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Cc FT 13701 13720
Cc FT 13721 13740
Cc FT 13741 13760
Cc FT 13761 13780
Cc FT 13781 13800
Cc FT 13801 13820
Cc FT 13821 13840
Cc FT 13841 13860
Cc FT 13861 13880
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Cc FT 13901 13920
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Cc FT 13961 13980
Cc FT 13981 14000
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Cc FT 14021 14040
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Cc FT 14061 14080
Cc FT 14081 14100
Cc FT 14101 14120
Cc FT 14121 14140
Cc FT 14141 14160
Cc FT 14161 14180
Cc FT 14181 14200
Cc FT 14201 14220
Cc FT 14221 14240
Cc FT 14241 14260
Cc FT 14261 14280
Cc FT 14281 14300
Cc FT 14301 14320
Cc FT 14321 14340
Cc FT 14341 14360
Cc FT 14361 14380
Cc FT 14381 14400
Cc FT 14401 14420
Cc FT 14421 14440
Cc FT 14441 14460
Cc FT 14461 14480
Cc FT 14481 14500
Cc FT 14501 14520
Cc FT 14521 14540
Cc FT 14541 14560
Cc FT 14561 14580
Cc FT 14581 14600
Cc FT 14601 14620
Cc FT 14621 14640
Cc FT 14641 14660
Cc FT 14661 14680
Cc FT 14681 14700
Cc FT 14701 14720
Cc FT 14721 14740
Cc FT 14741 14760
Cc FT 14761 14780
Cc FT 14781 14800
Cc FT 14801 14820
Cc FT 14821 14840
Cc FT 14841 14860
Cc FT 14861 14880
Cc FT 14881 14900
Cc FT 14901 14920
Cc FT 14921 14940
Cc FT 14941 14960
Cc FT 14961 14980
Cc FT 14981 15000
Cc FT 15001 15020
Cc FT 15021 15040
Cc FT 15041 15060
Cc FT 15061 15080
Cc FT 15081 15100
Cc FT 15101 15120
Cc FT 15121 15140
Cc FT 15141 15160
Cc FT 15161 15180
Cc FT 15181 15200
Cc FT 15201 15220
Cc FT 15221 15240
Cc FT 15241 15260
Cc FT 15261 15280
Cc FT 15281 15300
Cc FT 15301 15320
Cc FT 15321 15340
Cc FT 15341 15360
Cc FT 15361 15380
Cc FT 15381 15400
Cc FT 15401 15420
Cc FT 15421 15440
Cc FT 15441 15460
Cc FT 15461 15480
Cc FT 15481 15500
Cc FT 15501 15520
Cc FT 15521 15540
Cc FT 155

Qy	44	LDQITCWPQSPALVERPCEPEYENGIKYKNTTRNAYRECLENGTAASRINTYSHCEPILD	103
Dd	64	LDQITCWPQSPALVERPCEPEYENGIKYKNTTRNAYRECLENGTAASRINTYSHCEPILD	123
Qy	104	DKORRYDLHYRIALLINYLGHCVSVAALVAAFLFLVLBSIRCLRVNIHNNLITTFILRN	163
Dd	124	DKORRYDLHYRIALLINYLGHCVSVAALVAAFLFLVLBSIRCLRVNIHNNLITTFILRN	183
Qy	164	ITWFLLOLIDHEVHNEGNEVWCRCVTTINYPVVVTNFFWNVFVECCYLTALVMTYSTEHLR	223
Dd	184	IAMFLLOLIDHEVHNEGNEVWCRCITTIINYPVVVTNFFWNVFVECCYLTALVMTYSTEHLR	243
Qy	224	KMLFLFICGICCPITIIAANAAGKLYENECQMGKBPGLVDYIIYOGPIVLVLLINFLV	283
Dd	244	KMLFLFICGICCPITIIAANAAGKLYENECQMGKAGLDVDYIIYOGPIVLVLLINFLV	303
Qy	284	FNIVRIWTKLRASTTSETIOYRKAKAVATVLLPLLGITYMFLFVNPGEDBSLQIVITYF	343
Dd	304	FNIVRIWTKLRASTTSETIOYRKAKAVATVLLPLLGITYMFLFVNPGEDBSLQIVITYF	363
Qy	344	NSFLQSFQGFVSVFYCFPNGBEVRSLRRKMRWODHHAIRVAVAPAMSIPTISPTRISFH	403
Dd	364	NSFLQSFQGFVSVFYCFPNGBEVRSLRRKMRWODHHAIRVAVAPAMSIPTISPTRISFH	423
Qy	404	SIKOTAAV 411	
Dd	424	SIKOTAAV 431	

RESULT 5	
Q8WML8	
ID Q8WML8	PRELIMINARY;
	PRT; 437 AA

DT 01-MAR-2002 (TREMBLrel. 20, Created)
DT 01-MAR-2002 (TREMBLrel. 20, Last sequence update)
DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
DE Corticotropin releasing factor type 2b receptor.
GN Name=crt2b;
OS Tupaya glis belangeri (Common tree shrew).
OC Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
OC Mammalia; Eutheria; Scandentia; Tupaiidae; Tupaya.
OX NCBI_TaxID=37347;
RN [1]
RP
RX MEDLINE=99288234; PubMed=10336722;
RA Patchaundhuri M.R., Hauger R.L., Wille S., Fuchs E., Dautzenberg F.M.;
RT "Isolation and pharmacological characterization of two functional
splice variants of corticotropin-releasing factor type 2 receptor from
the tree shrew (Tupaya belangeri).";
RL J. Neuroendocrinol. 11:419-428(1999).

RP SEQUENCE FROM N.A.
 RA Dautzenberg F.M.;
 RL Submitted (DEC-2001) to the EMBL/GenBank/DBD databases.
 DR EMBL, AJ442243; CAD19579.1; ¹.
 DR GO; GO:0016020; C:membrane; IEA.
 DR GO; GO:0004930; F:G-protein coupled receptor activity; IEA.
 DR GO; GO:0004872; F:receptor activity; IEA.
 DR Pfam; PF00002; 7tm_2; 1.
 DR Pfam; PF02793; HRM_1.
 DR PRINTS; PRO1279; CRRECEPTOR.
 DR PRINTS; PRO1281; CRRECEPTOR2.
 DR PRINTS; PRO0249; GPCRSECRETIN.
 DR SMART; SMO0008; Hormr; 1.
 DR PROSITE; PS00649; G_PROTEIN_RECEP_F2_1; UNKNOWN_1.
 DR PROSITE; PS00650; G_PROTEIN_RECEP_F2_3; 1.
 DR PROSITE; PS00627; G_PROTEIN_RECEP_F2_3; 1.
 DR PROSITE; PS50261; G_PROTEIN_RECEP_F2_4; 1.
 KW Receptor.
 SQ SEQUENCE 437 AA; 50329 MW; E4721B7D80E1B07 CRC64;

Matches	355: Conservative	14: Mismatches	7: Indels	1: Gaps	1:
QY	35	GPYSYCNLTLDQIGTCWQSPGALVERPCPEYENGKIKYNTTRNAYRECLNGTWAASIN	94		
Db	62	GPYSYCNLTLLDQIGTCWPRSAAGALLERPCPEYENGKYNATRNARECLNGTWAASIN	121		
QY	95	YSHCEPILDDKORKYDLYHRYTALIIINNYGHCVSVVALVAAPFLFLVARSICLRVHMN	154		
Db	122	YSGCEPILDDK-RKYDLYHRYTALVAVNYIGHCVSMALVAAPFLFLALMSICLRVHMN	180		
QY	155	LITTFILRNITWPFLLQILIDHEVHEGENEWCVCVTTIFENYFVATNFEMWFVEGCVLHTAIY	214		
Db	181	LITTFILRNITWPFLLQILIDHEVHSNEWGCCTITIFNYFVATNFEMWFVEGCVLHTAIY	240		
QY	215	MTYSTELRKMLFLFICMGICDPIIIVAVAGKLTYENEQCFGKEPGDLVITYOGPIIL	274		
Db	241	MTYSTERLRKMLFLFICMGVCPPIIIIMAIKLYENKQCFGKEPGDLVITYOGPIIL	300		
QY	275	VLLINFEVLEFIVAILMTKLRASPTSETIQRKAVKATLVLLPLIGITMYMLFVNPGEDD	334		
Db	301	VLLINFEVLEFIVAILMTKLRASPTSETIQRKAVKATLVLLPLIGITMYMLFVNPGEDD	360		
QY	335	LSQIVIFYFNFSFLOSGFQFVSVYCFPFGNSVRSALRKRMHMODHIALRPVAVARASIP	394		
Db	361	LSQIVIFYFNFSFLOSGFQFVSVYCFPFGNSVRSALRKRMHMODHSLRPVAVARASIP	420		
QY	395	TSPTRISFHSIKQTAAY 411			
Db	421	TSPTRISFHSIKQTAAY 437			
RESULT 6					
Q7ZZZ2	Q7ZZZ2	PRELIMINARY;	PRT;	412 AA.	
AC	Q7ZZZ2;				
DT	01-JUN-2003 (TREMBLrel. 24. Created)				
DT	01-OCT-2003 (TREMBLrel. 25. Last sequence update)				
DT	01-MAR-2004 (TREMBLrel. 26. Last annotation update)				
DE	Putative corticotropin-releasing hormone receptor type 2.				
GN	Name=CRH-R2;				
OS	Gallus gallus (Chicken).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Archosauirata; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;				
CC	Gallus.				
OX	NCBI_TaxID=9031;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RC	TISUB=Cerebellum;				
EX	PubMed=12970166; DOI=10.1210/en.2003-0526;				
RA	De Groef B., Goris N., Archens L., Kuhn E.R., Darras V.M.;				
RT	"Corticotropin-releasing hormone (CRH)-induced thyrotropin release is				
RT	directly mediated through CRH receptor type 2 on thyrotropes.";				
RL	Endocrinology 144:5537-5544 (2003).				
DR	EMBL; AJ557031; CAD89534.2; -				
DR	GO; GO:0016020; C:membrane; IEA.				
DR	GO; GO:0004930; F:G-protein coupled receptor activity; IEA.				
DR	GO; GO:0004872; F:receptor activity; IEA.				
DR	InterPro: IPR000832; GPCR secretin.				
DR	InterPro: IPR001879; hormn_receptor.				
DR	Pfam; PF00002; 7tm_2; 1.				
DR	Pfam; PF02793; HRM; 1.				
DR	PRINTS; PR00249; GPCRSECRETIN.				
DR	SMART; SMO0008; Hormr; 1.				
DR	PROSITE; PS00650; G_PROTEIN_RECP_F2_3; 1.				
DR	PROSITE; PS02227; G_PROTEIN_RECP_F2_3; 1.				
DR	PROSITE; PS50261; G_PROTEIN_RECP_F2_4; 1.				
KW	Receptor.				
SC	SEQUENCE 412 AA; 48095 MW; 641B269460EC4041 CRC64;				
Query Match 82.4%; Score 1836.5; DB 2; Length 412;					
Best Local Similarity 79.9%; Pred. No. 4.7e-110;					
Matches 338; Conservative 30; Mismatches 32; Indels 23; Gaps 4;					

Query Match	82.4%;	Score 1836.5;	DB 2;	Length 412;
Best Local Similarity	79.9%;	Pred. No. 4.7e-150;		
Matches 338;	Conservative 30;	Mismatches 32;	Indels 23;	Gaps 4;

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QY 1 MDAL---LLSLLEANCSLALAEELLDDMGEPDPDEGYS-----YCNTLLDQIG 48
Db 1 MDVTSQPILEEFEDANRSLDLQETVLES-----FSLSFGLGKLCNATTDQIG 50
QY 49 TCWPOSAGALVERCPPEYFNIGIKYNTTRNAYRECLENGTMASRINYSHCEPILDDKORK 108
Db 51 TCWPAASAGKLVRCPEFNGIKYNTTKNAYRECLGNGTMASKINYGCEPILDDK-RK 109
QY 109 YDLHYRIALLINYIGHCVSVALVAFLPLFLVLRISIRCLRNIYHNLITTFILRNITWFL 168
Db 110 YAHHYKALIIINYIGHCISVGLIYAFMLFLCLRSIRCLRNIYHNLITTFILRNIMWFL 169
QY 169 LQLDIHEHNEGNEWCRCVTTIFNFVNTNPFMMVEGCVLHTALVMTYSTHRLKRMFL 228
Db 170 LQMDIHNEHNEPCCRITTYVNFVNTNPFMMVEGCVLHTALVMTYSTDKRKWFL 229
QY 229 FIGMCIPIPIIYAAVAVGKLYENECQWFGKEBPDLDVYIYQSPILVLLINFLFNIVR 288
Db 230 FIGMCIPIPIIYAAVAVGKLYENECQWFGKEBPKYDIYIYQSPVLLVLLINFLFNIVR 289
QY 289 ILMTKLRASTSETIYQKRAVATLVLLPLLGITYMLFFVNGEDDLSQIVFIYNSFLQ 348
Db 290 ILMTKLRASTSETIYQKRAVATLVLLPLLGITYMLFFVNGEDDLSQIVFIYNSFLQ 349
QY 349 SFQGFVSVFYCFNFGVEVSALRKRMHMODHIALRVYARAMSIPSPTRISFHSIKQT 408
Db 350 SFQGFVSVFYCFNFGVEVSALRKRMHMODHSLRVYARAMSIPSPTRISFHSIKQT 409
QY 409 AAV 411
Db 410 AAV 412

RESULT 7
CRF2_XENLA
ID CRF2_XENLA STANDARD; PRT; 413 AA.
AC 042603;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 25-OCT-2004 (Rel. 45, Last annotation update)
DE Corticotropin releasing factor receptor 2 precursor (CRF-R 2) (CRF2)
DE (Corticotropin-releasing hormone receptor 2) (CRH-R 2).
GN Name=CRF2;
OS Xenopus laevis (African clawed frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipidae; Pipidae;
OC Xenopodinae; Xenopus.
OX NCBI_Taxid=8355;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain, and Heart;
RX MEDLINE=97465573; PubMed=9326293;
RA Dautzenberg F.M., Dietrich K., Palchaudhuri M.R., Spiess J.;
RT "Identification of two corticotropin-releasing factor receptors from
RT Xenopus laevis with high ligand selectivity: unusual pharmacology of
RT the type 1 receptor."
RL J. Neurochem. 69:1640-1649(1997).
CC -!- FUNCTION: This is a receptor for corticotropin releasing factor.
CC Shows high-affinity binding for urotensin I. The activity of this
CC receptor is mediated by G proteins which activate adenylyl cyclase
CC (By similarity).
CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 2 family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; Y14037; CAAV4364.1; -.
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DR InterPro; IPR000832; GPCR_secretin.
DR InterPro; IPR001879; hormn_receptor.
DR Pfam; PF00002; 7tm_2; 1.
DR Pfam; PF02793; HRM; 1.
DR PRINTS; PR00249; GPCRSECRETIN.
DR SMART; SM00008; Hormr; 1.
DR PROSITE; PS00649; G_PROTEIN_RECPE_F2_1; 1.
DR PROSITE; PS00650; G_PROTEIN_RECPE_F2_2; 1.
DR PROSITE; PS50227; G_PROTEIN_RECPE_F2_3; 1.
DR PROSITE; PS50261; G_PROTEIN_RECPE_F2_4; 1.
DR G-protein coupled receptor; Glycoprotein; Signal; Transmembrane.
FT SIGNAL 1
FT CHAIN ? 413
FT Corticotropin releasing factor receptor
FT DOMAIN ? 120
FT TRANSMEM 121 141
FT DOMAIN 142 150
FT TRANSMEM 151 170
FT DOMAIN 171 187
FT TRANSMEM 188 211
FT DOMAIN 212 225
FT TRANSMEM 226 247
FT DOMAIN 248 266
FT TRANSMEM 267 289
FT DOMAIN 290 312
FT TRANSMEM 313 332
FT DOMAIN 333 347
FT TRANSMEM 348 367
FT DOMAIN 368 413
FT CARBOHYD 16 16
FT CARBOHYD 77 77
FT CARBOHYD 89 89
FT CARBOHYD 97 97
SQ SEQUENCE 413 AA; 48458 MW; DAD422F0A96C4626 CRC64;

Query Match 80.5%; Score 1793; DB 1; Length 413;
Best Local Similarity 80.0%; Pred. No. 8.9e-121;
Matches 333; Conservative 30; Mismatches 45; Indels 8; Gaps 4;

QY 1 MDAA---LLSLLEANCSL--ALAEELLDDMGEPDPDEGYSYCNTLLDQIGTCWPOSA 55
Db 1 MDSTFELIIDEPDNCGLDLAFQDSFLHSSSSPFGEGP--YCSATIIDQIGTCWPSRL 58
QY 56 PGALVERCPPEYFNIGIKYNTTRNAYRECLENGTMASRINYSHCEPILDDKORKYDLHYRI 115
Db 59 AGEIIVERCPDPSFNGIRYNTTRNAYRECEFGNGTASMWNYGQCVPIIDNK-RKYALHYKI 117
QY 116 ALIINYIGHCVSVALVAFLPLFLVLRISIRCLRNIYHNLITTFILRNITWFLQLDIHE 175
Db 118 ALIINYIGHCISILALVIAFLPLFLCLRSIRCLRNIYHNLITTFILRNIMWFLQMDIHN 177
QY 176 VHEGNEWCRCVTTIFNFVNTNPFMMVEGCVLHTALVMTYSTHRLKRMFLFIGWICP 235
Db 178 IHESNEWCRCITTYIYVNTNPFMMVEGCVLHTALVMTYSTDKRKWFLFIGWICP 237
QY 236 CPIIYAAVAVGKLYENECQWFGKEBPDLDVYIYQSPILVLLINFLFNIVRIIMTKLR 295
Db 238 SPIITWMAICKLFYENECWIGKEBPKYDIYIYQSPVLLVLLINFLFNIVRIIMTKLR 297
QY 296 ASTTSETIYQKRAVATLVLLPLLGITYMLFFVNGEDDLSQIVFIYNSFLQSFQGFV 355
Db 298 ASTTSETIYQKRAVATLVLLPLLGITYMLFFVNGEDDVDSQIVFIYNSFLQSFQGFV 357
QY 356 SVFYCFNFGVEVSALRKRMHMODHIALRVYARAMSIPSPTRISFHSIKQTAAY 411
Db 358 SVFYCFNFGVEVSALRKRMHMODHSLRVYARAMSIPSPTRISFHSIKQTAAY 413

RESULT 8
ID 068Y60 PRELIMINARY; PRT; 411 AA.
AC 068Y60;
DT 25-OCT-2004 (TrEMBLrel. 28, Created)
```

DT 25-OCT-2004 (TrEMBLrel. 28, last sequence update)
DE 25-OCT-2004 (TrEMBLrel. 28, last annotation update)
OC Corticotropin releasing factor receptor type 2.
GN Name=CRFR-2;
OS Rana catesbeiana (Bull frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Neobatrachia; Ranoidae; Rana.
OX NCBI_TaxID=8400;
RN [1]
RP SEQUENCE FROM N.A.
RA Ito Y., Ogata D., Haanuma I., Kikuyama S.;
RT "Molecular cloning of two corticotropin releasing factor receptors
from bullfrog."
RL Submitted (Aug-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB189111; BAD36784.1; -;
DR GO; GO:0004872; F:receptor activity; IEA.
DR InterPro; IPR003053; CRF2_receptor.
DR InterPro; IPR003051; CRF_receptor.
DR InterPro; IPR000832; GPCR_secretin.
DR InterPro; IPR001879; hormn_receptor.
DR Pfam; PF00002; 7tm_2; 1.
DR Pfam; PF02793; HRM; 1.
DR PRINTS; PR01279; CRFRECEPTOR.
DR PRINTS; PR01281; CRFRECEPTOR2.
DR PRINTS; PR00249; GPCRSECRETIN.
DR SMART; SM00008; Hormr; 1.
DR PROSITE; PS00649; G_PROTEIN_RECP_F2_1; 1.
DR PROSITE; PS00650; G_PROTEIN_RECP_F2_2; 1.
DR PROSITE; PS00227; G_PROTEIN_RECP_F2_3; 1.
DR PROSITE; PS50261; G_PROTEIN_RECP_F2_4; 1.
DR RECEPTOR.
KW RECEPTOR.
SQ SEQUENCE 411 AA; 48152 MW; 96D64ED8A24C179B CRC64;

Query Match 80.2%; Score 1787.5; DB 2; Length 411;
Best Local Similarity 80.7%; Pred. No. 2,3e-126;
Matches 331; Conservative 31; Mismatches 39; Indels 9; Gaps 4;
QY 5 LLSLLEANGCSLALAE--LLLDGGEPPDPGEPYVYCTTLDJOIGTCWPOSAPALVE 61
DB 8 IFIDERDANCSLDADODSFLTNHTFLPFD--GP--HCIAITDJOIGTCWPRISAGELVE 63
QY 62 RCPPEYFNGIKYNTTNAAVRECLNGTWSARINYSCHCEPLDDKORRYDLHYRIALI 121
DB 64 RCPDPSFNGIKYNTTAVREFCEFGTWSMNNYSQCVPLD--KKGHDLHYKIALIINY 121
QY 122 LGHCVSVVAIAAFLFLVLRSTRCLRNVIHNNLITTFILRNITWFLDLQIDHEVHNE 181
DB 122 LGHCISVLAIVLAFLLFLCLRSIRCLRNVIHNNLITTFILRNITWFLDLQIDHNHKE 181
QY 182 VMCRCCTTFNYSFVNFFMFMFEGCYLHTAIVMTYSTBHLRKMLFLFGMCIPCPPIYA 241
DB 182 IMCRCTTTIYNFVNFFMFMFEGCYLHTAIVMTYSTBHLRKMLFLFGMCIPCPPIYA 241
QY 242 WAVGKLYENEGQCFKPEKGDVLDVYIYOGPIILVLLINFEVLFNIVRIIMTKLRAS 301
DB 242 WAIKGLYENEGQCFKPEKGDVLDVYIYOGPIILVLLINFEVLFNIVRIIMTKLRAS 301
QY 302 TIQYRAVAVATLVLLPLLGITTYMLFVNPGEDDLSQIVPIYNSFIQSFGGFFVS 361
DB 302 TIQYRAVAVATLVLLPLLGITTYMLFVNPGEDDLSQIVPIYNSFIQSFGGFFVS 361
QY 362 FNGEVSALARKRHRMODHNLAVPARAMSIPTSPTRISFHSIKOTAAV 411
DB 362 LNGEVSALARKRHRMODHNLAVPARAMSIPTSPTRISFHSIKOTAAV 411

RESULT 9
Q98UC1 PRELIMINARY; PRT; 405 AA.
AC Q98UC1;
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, last annotation update)

DE Corticotropin releasing factor receptor 2.
OS Ameiurus nebulosus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Siluriformes;
OC Ictaluridae; Ameiurus.
OX NCBI_TaxID=27778;
RN [1]
RP SEQUENCE FROM N.A.
RA Medline=21066341; PubMed=1145609; DOI=10.1210/en.142.1.446;
RX Arai M., Asai I.O., Abou-Samra A.B.;
RT "Characterization of three corticotropin-releasing factor receptors in
rat pituitary and utrophys."
RL Endocrinology 142:446-454 (2001).
DR EMBL; AF229360; AA01069.1; -;
DR GO; GO:0016020; C:membrane; IEA.
DR GO; GO:0004930; F:G-protein coupled receptor activity; IEA.
DR GO; GO:0004872; F:receptor activity; IEA.
DR InterPro; IPR003053; CRF2_receptor.
DR InterPro; IPR003051; CRF_receptor.
DR InterPro; IPR000832; GPCR_secretin.
DR InterPro; IPR001879; hormn_receptor.
DR Pfam; PF00002; 7tm_2; 1.
DR Pfam; PF02793; HRM; 1.
DR PRINTS; PR01279; CRFRECEPTOR.
DR PRINTS; PR01281; CRFRECEPTOR2.
DR PRINTS; PR00249; GPCRSECRETIN.
DR SMART; SM00008; Hormr; 1.
DR PROSITE; PS00650; G_PROTEIN_RECP_F2_2; 1.
DR PROSITE; PS00227; G_PROTEIN_RECP_F2_3; 1.
DR PROSITE; PS50261; G_PROTEIN_RECP_F2_4; 1.
DR RECEPTOR.
KW RECEPTOR.
SQ SEQUENCE 405 AA; 46823 MW; E05E96BCFEAD5CC5 CRC64;

Query Match 80.2%; Score 1787; DB 2; Length 405;
Best Local Similarity 79.7%; Pred. No. 2,5e-126;
Matches 329; Conservative 35; Mismatches 39; Indels 10; Gaps 4;
QY 1 MDAALI-LSLLEANGCSLALAE--LLLDGGEPPDPGEPYVYCTTLDJOIGTCWPOSAPGA 58
DB 1 MEVSLLELSVENCGLA-----DAFDPAYGNASDALYCNATADDEIGTCWPRSGAGR 53
QY 59 LVERPCPEYFNGIKYNTTNAAVRECLNGTWSARINYSCHCEPLDDKORRYDLHYRIALI 118
DB 54 VVARPCDPFNGIKYNTSTSAVRECLNGTWSAFKINYSCEPLLEK--KYPHYRIALI 112
QY 119 INYLGHCVSVVAIAAFLFLVLRSTRCLRNVIHNNLITTFILRNITWFLDLQIDHEVH 178
DB 113 INYLGHCVSVVAIAAFLFLVLRSTRCLRNVIHNNLITTFILRNITWFLDLQIDHNH 172
QY 179 GNEVWCRCCTTFNYSFVNFFMFMFEGCYLHTAIVMTYSTBHLRKMLFLFGMCIPCP 238
DB 173 RNEPWCRLITTYNFFVNFFMFMFEGCYLHTAIVMTYSTBHLRKMLFLFGMCIPCP 232
QY 239 IVAMAAGKLYENEGQCFKPEKGDVLDVYIYOGPIILVLLINFEVLFNIVRIIMTKLRAS 298
DB 233 IIAAAGKLYENEGQCFKPEKGDVLDVYIYOGPIILVLLINFEVLFNIVRIIMTKLRAS 292
QY 299 TSETTIOYRAVAVATLVLLPLLGITTYMLFVNPGEDDLSQIVPIYNSFIQSFGGFFVS 358
DB 293 TSETTIOYRAVAVATLVLLPLLGITTYMLFVNPGEDDLSQIVPIYNSFIQSFGGFFVS 352
QY 359 YCFNGEVSALARKRHRMODHNLAVPARAMSIPTSPTRISFHSIKOTAAV 411
DB 353 YCFNGEVSALARKRHRMODHNLAVPARAMSIPTSPTRISFHSIKOTAAV 405

RESULT 10
Q8AWA1 PRELIMINARY; PRT; 414 AA.
AC Q8AWA1;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, last sequence update)

DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
 DE Corticotropin-releasing factor receptor type 2.
 GN Name=crf2;
 OS Oncomyrnchus keta (Chum salmon).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Actinopterygii; Neopterygii; Teleostei; Euteleostei;
 CC Protacanthopterygii; Salmoniformes; Salmonidae; Oncomyrnchus.
 OC NCBI_TaxID=8018;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC Tissue=Heart;
 RA Pohl S., Darlison M.G., Lederis K., Richter D.;
 RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AJ277158; CAC81754.1; -.
 DR GO; GO:0016020; G:membrane; IEA.
 DR GO; GO:0004930; F:G-protein coupled receptor activity; IEA.
 DR GO; GO:0004872; F:receptor activity; IEA.
 DR InterPro; IPR003053; CRF2_receptor.
 DR InterPro; IPR003051; CRF_receptor.
 DR InterPro; IPR000832; GPCR_secretin.
 DR InterPro; IPR001879; hormn_receptor.
 DR Pfam; PF00002; 7tm_2; 1.
 DR Pfam; PF02793; HRM; 1.
 DR PRINTS; PR01279; CRPRECEPTOR.
 DR PRINTS; PR01281; CRPRECEPTOR2.
 DR PRINTS; PR00249; GPCRSECRETIN.
 DR SMART; SMO0008; Hornr; 1.
 DR PROSITE; PS00650; G_PROTEIN_RECEP_F2_2; 1.
 DR PROSITE; PS50227; G_PROTEIN_RECEP_F2_3; 1.
 DR PROSITE; PS50261; G_PROTEIN_RECEP_F2_4; 1.
 KM Receptor.
 SQ SEQUENCE 414 AA; 48329 MW; 11FB2B9E481CCC CRC64;

Query Match 79.9%; Score 1780.5; DB 2; Length 414;
 Best Local Similarity 77.3%; Pred. No. 7.8e-126;
 Matches 326; Conservative 36; Mismatches 41; Indels 19; Gaps 4;

QY 1 MDALLLSL-----BANCSLALAEELLDDGWMGEPDPEGPVS-----YCNLTLDQIGT 49
 DB 1 MDATYQIIFGFBGDPNCS-----VMSFQDSFYENASFSLMPFDGLYCNATDEIGT 53
 QY 50 CWPQAPGALVLRPEPEYENGKYNMTNNAVRECELENGTWMARINYSCEPLDKOKY 109
 DB 54 CWPKNTGRMWRPPEYINGVKYNTTSAYRECDINGWALKSNYSCEPLERK-RKY 112
 QY 110 DLHYRIALINLYGHCVSVALVAFLFLVLRISIRCLRNVIHMLITTFILRNITWELL 169
 DB 113 PMHYKIALINLYGHCISVGLVAVFIFLCIRSRICRLRNITHMLITTFILRNITWELL 172
 QY 170 QIDHEVHEGNEVWCRCVTTIFNYFVVTNFMFMFVEGCVLHTAIVMTYSTEHLRWLPLF 229
 DB 173 QIDHNHESNEPWCRLITTIYNYFVTNFMFMFVEGCVLHTAIVMTYSTDLKKWVPLF 232
 QY 230 IGMCIPCPIYMAIGKLYNENOCWFGKPEKPIDYIYGCVILVLLINPFLNIVRI 292
 DB 233 IGMTKLRASTSETIQRKAVKATVLLPLGITYMLFVNPEDEDDLSQIVFYNSPLQS 349
 QY 290 LMTKLRASTSETIQRKAVKATVLLPLGITYMLFVNPEDEDDLSQIVFYNSPLQS 349
 DB 293 LMTKLRASTSETIQRKAVKATVLLPLGITYMLFVNPEDEDDLSQIVFYNSPLQS 352
 QY 350 FQGFVSVYVYCFNCEVRSALAKRWHRWODHHLAEVPAVAMSIFTSPTRIISFIKQTA 409
 DB 353 FQGFVSVYVYCFNCEVRSALAKRWHRWODHHLAEVPAVAMSIFTSPTRIISFIKQTA 412
 QY 410 AV 411
 DB 413 AV 414

RESULT 11
 CRFL_CHICK STANDARD; PRT; 420 AA.
 ID CRFL_CHICK

AC Q90812;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 25-OCT-2004 (Rel. 45, Last annotation update)
 DE Corticotropin releasing factor receptor 1 precursor (CRF-R) (CRF1)
 DE (Corticotropin-releasing hormone receptor 1) (CRH-R 1).
 OS Gallus gallus (Chicken)
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
 CC Gallus.
 OC NCBI_TaxID=9031;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=96107136; PubMed=8536612; DOI=10.1210/en.137.1.192;
 RX Yu J., Xie L.Y., Abou-Samra A.-B.;
 RT "Molecular cloning of a type A chicken corticotropin-releasing factor
 RT receptor with high affinity for urotensin I."
 RU Endocrinology 137:192-197(1996).
 CC -!- FUNCTION: This is a receptor for corticotropin releasing factor.
 CC Shows high-affinity binding for urotensin I. The activity of this
 CC receptor is mediated by G proteins which activate adenylyl
 CC cyclase.
 CC -!- SUBCELLULAR LOCATION: Integral membrane protein.
 CC -!- SIMILARITY: Belongs to the G-protein coupled receptor 2 family.
 CC -----
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 CC -----
 DR EMBL; L41563; AAA96656.1; -.
 DR InterPro; IPR000832; GPCR_secretin.
 DR InterPro; IPR001879; hormn_receptor.
 DR Pfam; PF00002; 7tm_2; 1.
 DR Pfam; PF02793; HRM; 1.
 DR PRINTS; PR00249; GPCRSECRETIN.
 DR SMART; SMO0008; Hornr; 1.
 DR PROSITE; PS00649; G_PROTEIN_RECEP_F2_1; 1.
 DR PROSITE; PS00650; G_PROTEIN_RECEP_F2_2; 1.
 DR PROSITE; PS50227; G_PROTEIN_RECEP_F2_3; 1.
 DR PROSITE; PS50261; G_PROTEIN_RECEP_F2_4; 1.
 KM G-protein coupled receptor; Glycoprotein; Signal; Transmembrane.
 FT SIGNAL 1 28
 FT CHAIN 29 420
 FT DOMAIN 29 126
 FT TRANSMEM 127 147
 FT DOMAIN 148 156
 FT TRANSMEM 157 176
 FT DOMAIN 177 194
 FT TRANSMEM 195 218
 FT DOMAIN 219 232
 FT TRANSMEM 233 254
 FT DOMAIN 255 273
 FT TRANSMEM 274 296
 FT DOMAIN 297 319
 FT TRANSMEM 320 339
 FT DOMAIN 340 354
 FT TRANSMEM 355 374
 FT DOMAIN 375 420
 FT DISULFID 49 92
 FT DISULFID 49 92
 FT DISULFID 73 107
 FT CARBOHYD 43 43
 FT CARBOHYD 50 50
 FT CARBOHYD 83 83
 FT CARBOHYD 95 95
 FT CARBOHYD 103 103
 SQ SEQUENCE 420 AA; 48600 MW; 8C5C992925F62316 CRC64;

Query Match	71.5%	Score 1593	DB 1	Length 420
Best Local Similarity	71.5%	Pred. No. 1e-111,		
Matches 294	Conservative 45	Mismatches 58	Indels 14	Gaps 4
Qy	2	DAALLSLLEANCSTALAEELLDDMGEPDPPEGYSYSCNTLLDIDIGTCWPGQSAFGALVE	61	
Db	23	DSPVASISIOEYOC-----ESLL-----PTTNHTGPGCNASVDLIGTCWPSRASVGQIYVA	70	
Qy	62	RPCEYFENGICAKNTTRNAYRECLNGTASRINYSHCERILDDKDKRKVDLHRYALLINYY	121	
Db	71	RPCEYFEGVARNNTNNNGYRECLANGSMAARNYSOCCEILSEERKS-KLHHIAVIINYY	129	
Qy	122	LGHCSVALAAEFLPLFLVRSIRCLRANVIHNNLTTFELIRNIWFFLLQI-IDHEVHEGN	180	
Db	130	LGHCSIGTLLVAFVLFPMRLRSIRCLRNI IHNNLTALIRNATFVQVLTNNPEVHSN	189	
Qy	181	EVMGRCAVTTINNYFVVTNPFMMWFVEGCVLHRAIVMTYSTEHLRKLLPLFIGMCPICPIIV	240	
Db	190	VVMCRVLVTAANNYFHVVTNPFMMWFEGCVLHRAIVLTYSTDKRKMMFCIGMCIPIPIIV	249	
Qy	241	AMAVGKLYENBQCFGKEPGDLVYIYQGPILVLLINFEVLFNVIIVLMTKLRASSTTS	300	
Db	250	AMALGKLYNDEKCMFGKRGAGVYTDYIYQGPILVLLINFLIFLPIVIAVILMTKLRASSTTS	309	
Qy	301	ETIQYRKAVKATVLLPLLGITTYMLFVNPGEDISQIVFYENSFLDSFOGFVYSVYC	360	
Db	310	ETIQYRKAVKATVLLPLLGITTYMLFVNPGEDISRIVFYENSFLDSFOGFVYSVYC	369	
Qy	361	FFNEVSRALKRMRMODHHAIRVPVARSISIPSRISPHSKIKORAAV	411	
Db	370	FLNSEVSRVAKRMRMODKHSIRKRVAAASIPSPRVSHSHSKOSSAV	420	

Query Match	70.6%	Score 1574	DB 2	Length 415
076LL8	PRELIMINARY;	PRT;	415 AA.	
AC 076LL8;				
DT 05-JUL-2004 (TREMBLrel. 27, Created)				
DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)				
DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)				
DE Corticotropin releasing factor receptor type 1.				
OS Name=CRF1;				
OS Macaca mulatta (Rhesus macaque).				
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;				
OC Cercopithecoidea; Macaca.				
OX NCBI_TaxID=9544;				
RN [1]				
RP SEQUENCE FROM N.A.				
RA Oshida Y., Ikeda Y., Chaki S., Okuyama S.;				
RL Submitted (JAN-2002) to the EMBL/Genbank/DBJ databases.				
RL EMBL; AB078141; BAD02831.1; -				
DR GO; GO:0016020; C:membrane; IEA.				
DR GO; GO:0004930; F:G-protein coupled receptor activity; IEA.				
DR GO; GO:0004872; F:receptor activity; IEA.				
DR InterPro; IPR003052; CRF1_receptor.				
DR InterPro; IPR003051; CRF_receptor.				
DR InterPro; IPR000832; GPCR_secretin.				
DR InterPro; IPR001879; hormn_receptor.				
DR Pfam; PF000002; 7tm_2; 1.				
DR Pfam; PF02793; HRM_1.				
DR PRINTS; PRO1279; CRPRECEPTOR.				
DR PRINTS; PRO1280; CRPRECEPTOR1.				
DR PRINTS; PRO0249; GPCRSECRETIN.				
DR SMART; SMO0008; Hornr; 1.				
DR PROSITE; PS00649; G_PROTEIN_RECEP_F2_1; 1.				
DR PROSITE; PS00650; G_PROTEIN_RECEP_F2_2; 1.				
DR PROSITE; PS50227; G_PROTEIN_RECEP_F2_3; 1.				
DR PROSITE; PS50261; G_PROTEIN_RECEP_F2_4; 1.				
KW Receptor.				
SC SEQUENCE 415 AA; 47784 MW; 84c530DEC6DA97AD CRC64;				

	Best Local Similarity	69.4%	Pred. No. 2,7e-110;	
	Matches	290;	Conservative	52; Indels
			24;	Gaps
				5;
QY	4	ALL-----SLLEANC-SLALAEELLIDGKEBPDPDEGRYSQNTLTDIGTCWPOS	54	
Db	12	ALLLLGLINPVASLIDQHCESLISANSI-----SGHCNANASVDLIGTCWPRS	58	
QY	55	APGALVERPCPEYENGKIKYNTTRNAARECLENGTWASINSHEPILDDKQKDYLAHR	114	
Db	59	PAGOLVAPCPAPFYGVARYNTNNGYRRECLANGSMAARVANSBEOQELINE-EKSKAHYH	117	
QY	115	IALLINNYGHCVSVAAFLFLVLRISIRCLNINVHMLITTEPIILNIIMPFLQD-ID	173	
Db	118	VAVLINNYGHGICSLVALLVAVFLRLRSIRCLNIIHMLNLSAFLRNATAEVVOQLMS	177	
QY	174	HEVHEGNEVWCRCVTIIFFNVFVNFFPMFPEGGYCLHTAIYMTSTEBHAKMFLFICOWC	233	
Db	178	PEVHOSNNGWCRDLTAAYANFYHVNFPMFMBEGGYCLHTAIVLYTSTDLRKMCFICOMG	237	
QY	234	IPCPILYAMAVAGKLYENEBQCFEKEPEDVDVYIYOGPIIVLLINFEVLENIYRILMTK	293	
Db	238	VPFPIIYAMAIGKLYUDNEKCMFPGKRGVYDYIYOGPMIIVLLINFIPLNIYRILMTK	297	
QY	294	LRASTSTETIOYRRAVAVKATLVLLFLDLGITTYMLFVNVPREDDELSDQIVIFRNSFIQSPOGF	353	
Db	298	LRASTTSETIOYRRAVAVATLVLLFLDLGITTYMLFVNVPREDDEVSVVPIFYNSPLESPGOF	357	
QY	354	FVSPFYPCFENGEVSAALRKRMHRODNHLYLVPARAMSITPSPTSRISFHSIKOTAAV	411	
Db	358	FVSPFYPCFCLNSEVSAIRKRMHRODKSITARVARAMISITSPRVSFHSIKOSTAV	415	

Query Match	Best Local Similarity	Score 1573;	DB 2;	Length 415;
08K3R2	PRELIMINARY;	PRT;	415 AA.	
AC	08K3R2;			
DT	01-OCT-2002 (TREMBLrel. 22, Created)			
DT	01-OCT-2002 (TREMBLrel. 22, Last sequence update)			
DT	01-JUN-2003 (TREMBLrel. 24, Last annotation update)			
DE	Type-1 corticotropin-releasing hormone receptor alpha isoform.			
GN	Name=CH-R1;			
OS	Mesocricetus auratus (Golden hamster).			
OC	Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;			
OC	Mesocricetus.			
OX	NCBI_TaxID=10036;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RA	Pisarchik A.V., Slominski A.;			
RL	Submitted (May-2001) to the EMBL/GenBank/DBJ databases.			
DR	EMBL: AY034599; AAK59707.1; -.			
DR	GO: GO:0016020; C:membrane; IEA.			
DR	GO: GO:0004930; F:G-protein coupled receptor activity; IEA.			
DR	GO: GO:0004872; F:receptor activity; IEA.			
DR	InterPro: IPR003052; CRF1_receptor.			
DR	InterPro: IPR003051; CRF_receptor.			
DR	InterPro: IPR000832; GPCR_secretin.			
DR	InterPro: IPR001879; hormn_receptor.			
DR	Pfam: PF00002; 7tm_2; 1.			
DR	Pfam: PF02793; HRM; 1.			
DR	PRINTS: PRO1279; CRPRECEPTOR.			
DR	PRINTS: PRO1280; CRPRECEPTOR1.			
DR	PRINTS: PRO0249; GPCRSECRETIN.			
DR	SMART: SMO0068; Hormr; 1.			
DR	PROSITE: PS00649; G_PROTEIN_RECCEP_F2_1; 1.			
DR	PROSITE: PS00650; G_PROTEIN_RECCEP_F2_2; 1.			
DR	PROSITE: PS50227; G_PROTEIN_RECCEP_F2_3; 1.			
DR	PROSITE: PS50261; G_PROTEIN_RECCEP_F2_4; 1.			
KW	Receptor.			
SEQ	SEQUENCE 415 AA; 47702 MW; 5008ABDD617B5F19E CRC64;			

Query Match	70.4%	Score 1569.5	DB 2	Length 415
Best Local Similarity	70.1%	Pred. No. 5.8e-110		
Matches 289	Conservative 50	Mismatches 62	Indels 11	Gaps 4
QY	3	AAALLSLLEANCSLALAEELLDDMGEPDDEPGYS--YCNLTIDLOIGTCWPOSAPGLV	60	
DB	12	ALLLLGPNPVSASLQ-----DHCESLSTPSNVSGLCNASVDLIGTCWPRSDAGLV	64	
QY	61	BRPCPEYNGIKKNTTRNAYRECELENGWASRIYNSHCEPIITDDKORKYDHYITALIN	120	
DB	65	VRPCPAFYGYRATYTTNNGYRECLANGSAAWARYVSECETLINE-EKSKRHHYAAVLIN	123	
QY	121	YLGHCVSVAAVAAFLPLVLRISRCLEARNVHMULTITPILRINTFWPLLOD-IDHEVHEG	179	
DB	124	YLGHCSLVALVAFPLFLRLRSIRCLRNIIHNMPLISAFILRKATWPFVOLLTMSPEVHQ	183	
QY	180	NEVVCRCCTTTFNFVVVNPFMMFVEGCGYLTALVMTYSTHELRKMLFLFGWCIPCDII	239	
DB	184	NVGMCRVLTAAYNFHTNPFMMGEGGYLTALVLTSTDRLRKMMVCCGMGVPFPII	243	
QY	240	VAAVAVGKLYENECOWFGEKPGDLVDVITYOGPIILVLLINFPLEFNIVRIIMTKLRASTT	299	
DB	244	VAAAIIGKLYIYNEKCMFEGKRPGVYTDITYOGPMILVLLINIFLFINRIIMTKLRASTT	303	
QY	300	SETTOYRKAVALTVLLPLIGITYMLFPVNGEDDLQIVEIFYNSFLQSFQGFVSVFY	359	
DB	304	SETTOYRKAVALTVLLPLIGITYMLFPVNGEDDVSRVVFYIYNSFLSFQGFVSVFY	363	
QY	360	CFENGVEVSALRKTHRWODHHALRVVYARAMSITPTSTRISEHSIKTAAV	411	

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 CC EMBL: X7305; CAAS1053.1; -
 CC EMBL: AF483484; AAL90758.1; -
 CC EMBL: AF483485; AAL90759.1; -
 CC PIR: S39535; S39535.
 CC MGD: MGI:88498; Ctr1.
 CC InterPro: IPR000832; GPCR_secretin.
 CC InterPro: IPR001879; hormn_receptor.
 CC Pfam: PF00002; 7tm_2; 1.
 CC Pfam: PF02793; HRM_1.
 CC PRINTS: PR00249; GPCRSECRETIN.
 CC SMART: SM00008; Hormr; 1.
 CC PROSITE: PS00649; G_PROTEIN_RECP_F2_1; 1.
 CC PROSITE: PS00650; G_PROTEIN_RECP_F2_2; 1.
 CC PROSITE: PS00227; G_PROTEIN_RECP_F2_3; 1.
 CC PROSITE: PS00251; G_PROTEIN_RECP_F2_4; 1.
 CC G-protein coupled receptor; Glycoprotein; Phosphorylation; Signal;
 CC Transmembrane.
 CC SIGNAL 1 23 Potential.
 CC CHAIN 24 415 Corticotropin releasing factor receptor
 FT DOMAIN 24 121 Extracellular (Potential).
 FT TRANSMEM 122 142 1 (Potential).
 FT DOMAIN 143 151 Cytoplasmic (Potential).
 FT TRANSMEM 152 171 2 (Potential).
 FT DOMAIN 172 189 Extracellular (Potential).
 FT TRANSMEM 190 213 3 (Potential).
 FT DOMAIN 214 227 Cytoplasmic (Potential).
 FT TRANSMEM 228 249 4 (Potential).
 FT DOMAIN 250 268 Extracellular (Potential).
 FT TRANSMEM 269 291 5 (Potential).
 FT DOMAIN 292 314 Cytoplasmic (Potential).
 FT TRANSMEM 315 334 6 (Potential).
 FT DOMAIN 335 349 Extracellular (Potential).
 FT TRANSMEM 350 369 7 (Potential).
 FT DOMAIN 370 415 Cytoplasmic (Potential).
 FT DISULFID 30 54 By similarity.
 FT DISULFID 44 87 By similarity.
 FT DISULFID 68 102 By similarity.
 FT CARBOHYD 38 38 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 45 45 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 78 78 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 90 90 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 98 98 N-linked (GlcNAc...) (Potential).
 SQ SEQUENCE 415 AA; 47769 MW; 81423BDA6D1CA070 CRC64;

Query Match 70.4%; Score 1569; DB 1; Length 415;
 Best Local Similarity 69.4%; Pred. No. 6,4e-110;
 Matches 290; Conservative 50; Mismatches 54; Indels 24; Gaps 5;

QY 4. ALLL-----SLALNC-SLALBELLDLWGEBPPDEGPYSYCNLTLDQIGTCWPOS 54
 DB 12 ALLLLGLNPVSTSLQOQCESLSLASNV-----SGLQCNASVDLIGTCWPRS 58
 QY 55 ABGALVERPCPEFENFKIKNTTNAAYRECLNGTWSARINYSCEPIIDDKRKDYDLHR 114
 DB 59 PAGQLVVRPCPAFFYGVRYNTTNGYRECLANGSMARVNSYSCQETLNE-EKSKVHYH 117
 QY 115 IALIINYLGHCVSVALLVAFLFLVLRISRCRNVIHMLITFFILRNITWFLQLQ-ID 173
 DB 118 IAVIINYLGHGISLVALLVAFVFLRLRSRCRLRNIIHMLISAFILRNATWFWQLTYS 177
 QY 174 HEVHEGNEWACRCVTTIFNFVVTNPFWMFVEGCYLAHTAIVMTYSTEHLLRKWLFLPIGWC 233
 DB 178 PEVHQSNAVACRLVTAAYNFHTVTFNPFWMFGEGCYLAHTAIVLTYSTDLRKWMFVCI GWG 237

QY 234 IPCPIIVAAVGLKYENQCFGEKPGDLVDYIYOGPIILVLLINFVLEFNIIVRIIMTX 293
 DB 238 VPEPIIVAAVIGLKYDNEKCMFGKRPVYTDYIYOGPIILVLLINFVLEFNIIVRIIMTX 297
 QY 294 LRASTSETIQRKAVKATLVLLPLIGITYMLFFVNPGEDDLSQIYFIYFNSTLQSFQGR 353
 DB 298 LRASTSETIQRKAVKATLVLLPLIGITYMLFFVNPGEDEVSRVVFYIYFNSTLQSFQGR 357
 QY 354 FVSVFYCFNPGVEYSALRKRMHRODHALLRVPARAMSIPSPTRISFHSIKOTAAY 411
 DB 358 FVSVFYCFNPGVEYSALRKRMHRODHALLRVPARAMSIPSPTRISFHSIKOTAAY 415

Search completed: October 3, 2005, 07:57:50
 Job time : 102 secs

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OM protein - protein search, using sw model

Run on: October 3, 2005, 07:50:24 ; Search time 91 Seconds

(without alignments)
1746.797 Million cell updates/sec

Title: US-10-821-502-4

Perfect score: 2228
Sequence: 1 MDALLSLLEANCSLALAE.....SIFPTFRISFHSIKQTAIV 411

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

A_Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1908s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2228	100.0	411	2	ABU62363 Rat corti
2	2228	100.0	411	2	AAO19428 Rat corti
3	2228	100.0	411	8	ADOS0799 Rat corti
4	2225	99.9	411	2	AAK90574 Rat CRF2-
5	2111	94.7	411	2	AAW16481 Human cor
6	2111	94.7	411	4	AAAB71867 Human CRF
7	2111	94.7	411	7	ADCB6183 Human GPC
8	2111	94.7	411	7	ADOC29267 Human GPC
9	2106	94.5	411	2	AAK90576 Human CRF
10	2106	94.5	411	5	AAO19424 Human cor
11	2106	94.5	411	6	ABP81806 Human cor
12	2106	94.5	411	8	ADOS0791 Human cor
13	2106	94.5	411	8	ADQ89168 Human uro
14	2055.5	92.3	411	2	ABU62364 Rat corti
15	2042.5	91.7	411	2	AAK90575 Rat CRF2-
16	2042.5	91.7	411	5	AAO19428 Rat corti
17	2042.5	91.7	411	8	ADOS0801 Rat corti
18	2026.5	91.0	431	2	AAK97293 Mouse CRF
19	2026.5	91.0	431	2	ABU62362 Mouse cor
20	2026.5	91.0	431	5	AAE26683 Mouse CRF
21	2026.5	91.0	431	5	AAO19431 Murine co
22	2026.5	91.0	431	5	ABU08079 Mouse cor
23	2026.5	91.0	431	6	ABG76050 Mouse cor
24	2026.5	91.0	431	8	ADJ65805 Mouse cor
25	2026.5	91.0	431	8	ADOC29268 Mouse GPC

26	2026.5	91.0	431	8	ADOS0805	Ados0805 mouse cor
27	1999	89.7	430	5	AAO19432	Aao19432 Murine co
28	1999	89.7	430	8	ADOS0807	Ados0807 mouse cor
29	1963	88.1	397	5	AAO19426	Aao19426 Human cor
30	1963	88.1	397	8	ADOS0795	Ados0795 Human cor
31	1962	88.1	438	5	AAO19425	Aao19425 Human cor
32	1962	88.1	438	8	ADOS0793	Ados0793 Human cor
33	1793	80.5	413	5	AAO19435	Aao19435 Xenopus c
34	1793	80.5	413	8	ADOS0813	Ados0813 Frog cort
35	1787	80.2	405	5	AAO19438	Aao19438 Fish cort
36	1787	80.2	405	8	ADOS0819	Ados0819 Brown bul
37	1593	71.5	420	5	AAO19440	Aao19440 Chicken c
38	1593	71.5	420	8	ADOS0823	Ados0823 Chicken c
39	1574	70.6	415	2	AAK69519	Aak69519 Human pit
40	1574	70.6	415	2	AAK97290	Aak97290 Human CRF
41	1574	70.6	415	2	AAW00159	Aaw00159 Human cor
42	1574	70.6	415	5	AAE26679	Aae26679 Human CRF
43	1574	70.6	415	5	AAO19420	Aao19420 Human cor
44	1574	70.6	415	5	AAO19421	Aao19421 Human cor
45	1574	70.6	415	5	ABG66957	Abg66957 Human cor

ALIGNMENTS

RESULT 1
ABU62363
ID ABU62363 standard; protein; 411 AA.

AC ABU62363;

DT 29-AUG-2003 (first entry)

DE Rat corticotropin release factor receptor, rCRF-R2alpha.

Corticotropin release factor; receptor; adrenocorticotrophic hormone; ACTH; blood flow; blood pressure; vascular bed; coronary blood flow; inflammation; vascular permeability; CRF-binding protein; parturition; Alzheimer's disease; chronic fatigue syndrome; appetite; alertness; rat; respiratory system; learning performance; depression; anxiety; memory; hypothalamic pituitary adrenal function; endocrine disorder; swelling; central nervous system disorder; CRF; rCRF-R2alpha.

OS Rattus sp.

PN US2003032587-A1.

PD 13-FEB-2003.

PF 26-MAR-2001; 2001US-00818009.

PR 13-JUN-1995; 95US-0028444P.

PR 11-AUG-1995; 95US-0002233P.

PR 12-JUN-1996; 96WO-US010240.

PR 10-DEC-1997; 97US-00981189.

XX (SALK) SALK INST BIOLOGICAL STUDIES.

XX Vale WW, Vaughan J, Donaldson CJ, Lewis KA, Sawchenko P;

XX Rivier JEF, Perrin MH;

XX WPI; 1997-077344/07.

PT Urocortin peptide(s) related to urocortin and corticotropin-releasing

PT factor - for increasing ACTH and beta-endorphin levels, lowering blood

CC pressure and improving mood, memory and learning performance.

CC The invention relates to a human urocortin (Ucn) peptide or an analogous

CC sequence having only conservative substitutions to the amino acid

CC residues in it, or an N-terminally shortened fragment of either which is

CC biologically active to increase adrenocorticotrophic hormone (ACTH)

production. Human urocortin or its N-terminally shortened antagonist peptide are useful for modifying blood flow and/or blood pressure and is further useful for modulating blood flow in a desired vascular bed. Human urocortin is also useful for increasing coronary blood flow and for decreasing swelling and/or inflammation and/or vascular permeability. A CRF-binding protein blocking compound is useful for increasing the in vivo level of CRF and/or Ucn. The amount of CRF-binding protein blocking compound is sufficient to promote parturition in a pregnant female. The amount of the compound administered is effective so as to result in an increase in free endogenous CRF and/or Ucn in the brain which causes improvement in short to medium term memory in a subject afflicted with Alzheimer's disease, relief from chronic fatigue syndrome, suppression of appetite, stimulation of the respiratory system, improvement in learning performance, improvement in memory, improvement in alertness, reduction of depression and/or lessening of anxiety. The compound is administered so that it reaches the brain. Human urocortin is useful for evaluating hypothalamic pituitary adrenal function in mammals with suspected endocrine or central nervous system pathology. Human urocortin antibodies are useful in diagnostic methods and systems for detecting the level of Ucn polypeptide, for immunoaffinity or affinity chromatography purification of Ucn, and also in human therapeutic methods. The present sequence represents the amino acid sequence of the rat corticotropin release factor receptor, rCTF-R2alpha

XX SQ Sequence 411 AA;

Query Match 100.0%; Score 2228; DB 2; Length 411;
Best Local Similarity 100.0%; Pred. No. 3e-212;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDALLLSLEANCSLALAEELLDDGGEPPDPGPGSYCNTTLDQIGTCWQSPAGALV 60
DB 1 MDALLLSLEANCSLALAEELLDDGGEPPDPGPGSYCNTTLDQIGTCWQSPAGALV 60
QY 61 ERPCPEYNGIKYNTTRNAARECLENGWASRIINSHCEPILDDKORKYDHYRIALIIIN 120
DB 61 ERPCPEYNGIKYNTTRNAARECLENGWASRIINSHCEPILDDKORKYDHYRIALIIIN 120
QY 121 YLGHCVSVVAAVAAFLFLVLSIRCLRNVIHMNIITTFILRNITWFLQLIDHEVHEGN 180
DB 121 YLGHCVSVVAAVAAFLFLVLSIRCLRNVIHMNIITTFILRNITWFLQLIDHEVHEGN 180
QY 121 YLGHCVSVVAAVAAFLFLVLSIRCLRNVIHMNIITTFILRNITWFLQLIDHEVHEGN 180
DB 181 EVMGRCVTTTINNYFVVTNFMFMFVGGCYLHTAIWVTSTELRKMLPFIQWCI PCPIIV 240
QY 181 EVMGRCVTTTINNYFVVTNFMFMFVGGCYLHTAIWVTSTELRKMLPFIQWCI PCPIIV 240
DB 181 EVMGRCVTTTINNYFVVTNFMFMFVGGCYLHTAIWVTSTELRKMLPFIQWCI PCPIIV 240
QY 241 AMAVGKLYYENQOCWFGKEPGDLVDYIYQGPILILVLIINFVFLFNIVRLMTKLRASSTTS 300
DB 241 AMAVGKLYYENQOCWFGKEPGDLVDYIYQGPILILVLIINFVFLFNIVRLMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITVLMFVNPGEDDLSQIVFIYNSFLQSPFGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLIGITVLMFVNPGEDDLSQIVFIYNSFLQSPFGFVSVFYC 360
QY 361 PFNGEVSALRKRRWHRMODHALLRVVAPARMSIPTSPRISFHSIKQYAAV 411
DB 361 PFNGEVSALRKRRWHRMODHALLRVVAPARMSIPTSPRISFHSIKQYAAV 411

RESULT 2
AAO19428 standard; protein; 411 AA.
XX AAO19428;
XX AC
XX 10-DEC-2002 (first entry)
XX
XX Rat corticotropin releasing factor receptor CRF2Ralpha.
XX
XX Human; rat; mouse; sheep; cow; chicken; CRF1R; CRF2R;
XX skeletal muscle atrophy; corticotropin releasing factor-2 receptor;
XX muscular dystrophy; corticotropin releasing factor-1 receptor;
XX gene therapy.

XX OS Rattus norvegicus.
XX
XX MO200269908-A2.
XX
XX
XX 12-SEP-2002.
XX
XX 06-MAR-2002; 2002WO-US007476.
XX
XX 06-MAR-2001; 2001US-00799978.
XX
XX (PROC) PROCTER & GAMBLE CO.
XX
XX Isfort RJ, Sheldon RJ;
XX
XX WPI; 2002-713413/77.
XX
XX N-PSDB; AAL49979.
XX
XX Identifying candidate compounds for regulating skeletal muscle mass or
XX treating skeletal muscle atrophy by identifying test compounds that bind
XX to, or activate, the corticotropin releasing factor-2 receptor.
XX
XX Claim 7; Page 112-113; 167pp; English.

XX The present invention relates to a method of identifying candidate
XX compounds for regulating skeletal muscle mass or function, and comprises
XX contacting a test compound with a corticotropin releasing factor-2
XX receptor (CRF2R) or with a cell expressing a functional CRF2R,
XX determining whether the test compound binds to, or activates, the CRF2R
XX and identifying the test compounds that bind to, or activates, the CRF2R
XX as candidate compounds for regulating skeletal muscle mass or function.
XX The method is useful for preparing a medicament for treating skeletal
XX muscle atrophy or for prophylactic treatment of muscular dystrophies. The
XX present sequence is a corticotropin releasing factor receptor

XX SQ Sequence 411 AA;

Query Match 100.0%; Score 2228; DB 5; Length 411;
Best Local Similarity 100.0%; Pred. No. 3e-212;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDALLLSLEANCSLALAEELLDDGGEPPDPGPGSYCNTTLDQIGTCWQSPAGALV 60
DB 1 MDALLLSLEANCSLALAEELLDDGGEPPDPGPGSYCNTTLDQIGTCWQSPAGALV 60
QY 61 ERPCPEYNGIKYNTTRNAARECLENGWASRIINSHCEPILDDKORKYDHYRIALIIIN 120
DB 61 ERPCPEYNGIKYNTTRNAARECLENGWASRIINSHCEPILDDKORKYDHYRIALIIIN 120
QY 121 YLGHCVSVVAAVAAFLFLVLSIRCLRNVIHMNIITTFILRNITWFLQLIDHEVHEGN 180
DB 121 YLGHCVSVVAAVAAFLFLVLSIRCLRNVIHMNIITTFILRNITWFLQLIDHEVHEGN 180
QY 181 EVMGRCVTTTINNYFVVTNFMFMFVGGCYLHTAIWVTSTELRKMLPFIQWCI PCPIIV 240
DB 181 EVMGRCVTTTINNYFVVTNFMFMFVGGCYLHTAIWVTSTELRKMLPFIQWCI PCPIIV 240
QY 241 AMAVGKLYYENQOCWFGKEPGDLVDYIYQGPILILVLIINFVFLFNIVRLMTKLRASSTTS 300
DB 241 AMAVGKLYYENQOCWFGKEPGDLVDYIYQGPILILVLIINFVFLFNIVRLMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITVLMFVNPGEDDLSQIVFIYNSFLQSPFGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLIGITVLMFVNPGEDDLSQIVFIYNSFLQSPFGFVSVFYC 360
QY 361 PFNGEVSALRKRRWHRMODHALLRVVAPARMSIPTSPRISFHSIKQYAAV 411
DB 361 PFNGEVSALRKRRWHRMODHALLRVVAPARMSIPTSPRISFHSIKQYAAV 411

RESULT 3
ADO50799 standard; protein; 411 AA.
ID ADO50799

XX AC ADO50799;
 XX 12-AUG-2004 (first entry)
 XX DT
 XX DE Rat corticotropin releasing factor receptor 2, CRF2R.
 XX KM Rat; receptor; corticotropin releasing factor receptor; CRF1R; CRF2R;
 XX KM skeletal muscle; muscle atrophy; skeletal muscle dystrophy;
 XX KM skeletal muscle hypertrophy; surgery; bed rest; broken bone;
 XX KM infectious disease; AIDS cachexia.
 XX OS Rattus norvegicus.
 XX PN US2004101911-A1.
 XX PD 27-MAY-2004.
 XX PF 27-AUG-2003; 2003US-00649852.
 XX PR 06-MAR-2001; 2001US-00799976.
 XX PA (PROC) PROCTER & GAMBLE CO.
 XX PI Isfort RJ, Sheldon RJ;
 XX PI MPI: 2004-459890/43.
 XX DR N-PSDB; ADO50798.
 XX PT Identifying compounds for regulating skeletal muscle mass or function, by
 XX PT contacting test compound with vertebrate corticotropin releasing factor2
 XX PT receptors (CRF2R), selecting compounds that bind or activate CRF2R.
 XX PS Claim 3; SEQ ID NO 18; 100pp; English.
 XX CC The invention relates to identifying candidate compounds for regulating
 XX CC skeletal muscle mass or function, comprising contacting a test compound
 XX CC with vertebrate corticotropin releasing factor 2 receptors (CRF 2 R),
 XX CC determining if the compound binds to or activates CRF2R, selecting
 XX CC compounds that bind or activate CRF 2 R, and determining if compound
 XX CC increases muscle mass or function in muscle atrophy model. Also included
 XX CC are identifying candidate therapeutic compounds from a group of one or
 XX CC more candidate compounds which have been previously determined to bind to
 XX CC or activate a vertebrate CRF 2 R (comprising administering the candidate
 XX CC compound to a non-human animal and determining whether the candidate
 XX CC compound regulates skeletal muscle mass or function in the treated
 XX CC animal), increasing skeletal muscle mass or function in a subject in
 XX CC which such an increase is desirable (comprising identifying a subject in
 XX CC which an increase in muscle mass or function is desirable and
 XX CC administering to the subject a safe and effective amount of a CRF 2 R
 XX CC agonist), a purified antibody specific for a CRF2R (where the antibody is
 XX CC a chimeric or human antibody), and a pharmaceutical composition
 XX CC comprising a safe and effective amount of a CRF2R agonist and carrier.
 XX CC The methods are useful for identifying candidate compounds for regulating
 XX CC skeletal muscle mass or function, for increasing skeletal muscle mass or
 XX CC function (in a subject in which an increase is desirable), for
 XX CC identifying candidate compounds that are potentially useful in the
 XX CC treatment of skeletal muscle dystrophy and for identifying compounds that
 XX CC prolong or augment the agonist-induced activation of CRF2R or of a CRF2R
 XX CC signal transduction pathway. The compound is useful for treating skeletal
 XX CC muscle hypertrophy and for modulating skeletal muscle atrophy induced by
 XX CC e.g. surgery, bed rest, broken bones, infectious disease or AIDS
 XX CC cachexia. The present sequence represents a corticotropin releasing
 XX CC factor receptor.
 XX SQ Sequence 411 AA;
 QY Query Match 100.0%; Score 2228; DB 8; Length 411;
 Best Local Similarity 100.0%; Pred. No.3e-212;
 Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 MDAALLSLLEANCSTLALAEELLDDGMBPPDEGPYSYCNITLDDIGTCWPOSAPGALV 60
 QY 61 ERPCPEYFNGIKYNTNRNAYRECLBNGTWASRIINYSCEPIIDDKORKYDLHYRIALIN 120
 DB 61 ERPCPEYFNGIKYNTNRNAYRECLBNGTWASRIINYSCEPIIDDKORKYDLHYRIALIN 120
 QY 121 YLGHCVSVVALVAAPLLPLVLSIRCLRVNIHWNLTITTEILRNITWFLQLIDHEVHEGN 180
 DB 121 YLGHCVSVVALVAAPLLPLVLSIRCLRVNIHWNLTITTEILRNITWFLQLIDHEVHEGN 180
 QY 181 EWCRCVTTITFNYPVTNTFNFMFVECCYHTAIWMTYSIEHLRKMLFLPIGWCIPCPITV 240
 DB 181 EWCRCVTTITFNYPVTNTFNFMFVECCYHTAIWMTYSIEHLRKMLFLPIGWCIPCPITV 240
 QY 241 AMAVGKLYENECQWKEPGDLVDYIYOGPIILVLIINFVLENIIVRIIMTLRASTTS 300
 DB 241 AMAVGKLYENECQWKEPGDLVDYIYOGPIILVLIINFVLENIIVRIIMTLRASTTS 300
 QY 301 ETIQYRKAVKATLVLLPLIGITYMLPFVNPGEDDLGQIVFIYNSFLQSFQGFVSVPYC 360
 DB 301 ETIQYRKAVKATLVLLPLIGITYMLPFVNPGEDDLGQIVFIYNSFLQSFQGFVSVPYC 360
 QY 361 FENGVEYRSALRKRMHMODHMLRVVAPAMSIPTSPPTISFHSIKOTAAV 411
 DB 361 FENGVEYRSALRKRMHMODHMLRVVAPAMSIPTSPPTISFHSIKOTAAV 411
 RESULT 4
 ID AAR90574 standard; protein; 411 AA.
 AC AAR90574;
 XX 08-APR-1996 (first entry)
 XX DE Rat CRF2-alpha receptor.
 XX KM CRF2-alpha receptor; corticotropin-releasing factor-2 receptor;
 XX KM cerebrovascular disorder; memory disorder; Alzheimer disease.
 XX OS Rattus sp.
 XX FH Key Location/Qualifiers
 FT 1..117 /label= Extracellular_N-terminal_domain
 FT 118..138 /label= Extracellular_domain
 FT 139..147 /label= Transmembrane_domain
 FT 148..167 /label= Intracellular_domain
 FT 168..184 /label= Transmembrane_domain
 FT 185..208 /label= Extracellular_domain
 FT 209..223 /label= Transmembrane_domain
 FT 224..244 /label= Intracellular_domain
 FT 245..261 /label= Transmembrane_domain
 FT 262..286 /label= Extracellular_domain
 FT 287..309 /label= Transmembrane_domain
 FT 310..329 /label= Intracellular_domain
 FT 330..342 /label= Transmembrane_domain
 FT 343..363 /label= Extracellular_domain
 FT 364..411 /label= Transmembrane_domain
 FT /label= C-terminal_intracellular_domain

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XX XX W09534651-A2.
XX PN
XX XX
XX PD 21-DEC-1995.
XX XX
XX PF 14-JUN-1995; 95WO-US007757.
XX XX
XX PR 14-JUN-1994; 94US-0029959.
XX PR 31-JAN-1995; 95US-0038143.
XX PR 07-JUN-1995; 95US-00485984.
XX XX
XX PA (NEUR-) NEUROCRINE BIOSCIENCES INC.
XX XX
XX PI Chalmers D, Lovenberg TW, Oltersdorf T, Liaw CW, Grigoriadis DE;
XX PI De Souza EB;
XX XX
XX DR WPI; 1996-049680/05.
XX DR N-PSDB; AAT12243.
XX XX
XX PT Corticotropin-releasing factor-2 receptor, and DNA encoding it - used to
XX PT isolate CRF-2 receptor antagonists for the treatment of cerebrovascular
XX PT disorders, memory disorders and Alzheimer's disease.
XX XX
XX PS Claim 13; Page 70-73; 109pp; English.
XX XX
XX CC Rat corticotropin-releasing factor-2-alpha (CRF2-alpha) receptor
XX CC (AAR90574) is a membrane-bound G-coupled protein receptor involved in
XX CC signal transduction. It can be produced by expression of encoding cDNA
XX CC (AAT12243) in prokaryotic or eucaryotic host cells. Recombinant CRF2
XX CC receptor is used to screen CRF2 receptor agonists and antagonists of
XX CC therapeutic applin., and to prepare antibodies which specifically bind to
XX CC CRF2 receptors
XX XX
XX SQ Sequence 411 AA;
XX XX
XX Query Match 99.9%; Score 2225; DB 2; Length 411;
XX Best Local Similarity 99.8%; Pred. No. 5,9e-212;
XX Matches 410; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX XX
QY 1 MDAALLSLLEANCGLALAEELLLDGMBPPDPGPGPSYSCNTTLDQIGTCMPQAPGALV 60
DB 1 MDAALLSLLEANCGLALAEELLLDGMBPPDPGPGPSYSCNTTLDQIGTCMPQAPGALV 60
XX XX
QY 61 ERPCPEYNGIKYNTTRNAVRECLNGTWASRINYSCEPILDKQRYDHLHYRIALIN 120
DB 61 ERPCPEYNGIKYNTTRNAVRECLNGTWASRINYSCEPILDKQRYDHLHYRIALIN 120
XX XX
QY 121 YLGHCVSVVAAVLAFLFLVLSIRCLRNVIHWNLTITFILRNITWFLQLIDHEVHSGN 180
DB 121 YLGHCVSVVAAVLAFLFLVLSIRCLRNVIHWNLTITFILRNITWFLQLIDHEVHSGN 180
XX XX
QY 181 EYWCRCVTTINNYFVVTNPFMMFVEGCYLHTAIWVTYSTEHRLKMLFLFIGMCIPCIIV 240
DB 181 EYWCRCVTTINNYFVVTNPFMMFVEGCYLHTAIWVTYSTEHRLKMLFLFIGMCIPCIIV 240
XX XX
QY 241 AMAVGKLYYENBQCFGKEPGDLVDYIYQGPILIVLLINFVFLFNIVIRILMTKLRASSTS 300
DB 241 AMAVGKLYYENBQCFGKEPGDLVDYIYQGPILIVLLINFVFLFNIVIRILMTKLRASSTS 300
XX XX
QY 301 ETIQYRKAVKATLVLLPLIGITYMLFFVNPGBDDLSQIVFIYFNSFLQSFQGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLIGITYMLFFVNPGBDDLSQIVFIYFNSFLQSFQGFVSVFYC 360
XX XX
QY 361 FFNGEVSALRKRMHRMODHALLRVVARANSIPTSPRISFHSIKQTAAY 411
DB 361 FFNGEVSALRKRMHRMODHALLRVVARANSIPTSPRISFHSIKQTAAY 411
XX XX
RESULT 5
AAM16481
ID AAM16481 standard; protein; 411 AA.
XX AC AAM16481;
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XX XX 20-JUN-1997 (first entry)
XX DT
XX XX
XX DE Human corticotropin releasing factor 2 receptor protein.
XX XX
XX KW Human; corticotropin; corticotropin; releasing factor 2; CRF2; receptor;
XX KW screen; agonist; antagonist; activation; inhibition; prevention;
XX KW treatment; dementia; obesity; acceleration; stress adaptation;
XX KW melancholia; anxiety; stress headache; AIDS;
XX KW acquired immunodeficiency syndrome; Alzheimer's disease;
XX KW gastrointestinal disorder.
XX XX
XX OS Homo sapiens.
XX OS
XX PN JP09070289-A.
XX PN
XX XX
XX PD 18-MAR-1997.
XX PD
XX PF 14-SEP-1995; 95JP-00237081.
XX PF
XX PR 27-JUN-1995; 95JP-00161213.
XX PR
XX PA (TAKEDA ) TAKEDA CHEM IND LTD.
XX PA
XX DR WPI; 1997-230023/21.
XX DR
XX DR N-PSDB; AAT166508.
XX XX
XX XX PCR primer for G protein conjugate type receptor protein DNA - and human
XX XX corticotropin releasing factor 2 receptor protein, useful to screen for
XX XX agonists and antagonists to treat dementia and anxiety.
XX XX
XX PS Claim 8; Page 39-40; 46pp; Japanese.
XX PS
XX XX
XX CC The present sequence is the human corticotropin releasing factor 2
XX CC (CRF2) receptor protein, which can be used to screen for an agonist or
XX CC antagonist which activates the receptor, or competitively inhibits the
XX CC binding of the receptor to CRF. The agonist can be used to prevent or
XX CC treat dementia and obesity, or accelerate stress adaptation. The
XX CC antagonist can be used to prevent or treat melancholia, anxiety, stress
XX CC headaches, AIDS, Alzheimer's disease or gastrointestinal disorders
XX CC
XX SQ Sequence 411 AA;
XX XX
XX Query Match 94.7%; Score 2111; DB 2; Length 411;
XX Best Local Similarity 93.9%; Pred. No. 1.3e-200;
XX Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;
XX XX
QY 1 MDAALLSLLEANCGLALAEELLLDGMBPPDPGPGPSYSCNTTLDQIGTCMPQAPGALV 60
DB 1 MDAALLSLLEANCGLALAEELLLDGMBPPDPGPGPSYSCNTTLDQIGTCMPQAPGALV 60
XX XX
QY 61 ERPCPEYNGIKYNTTRNAVRECLNGTWASRINYSCEPILDKQRYDHLHYRIALIN 120
DB 61 ERPCPEYNGIKYNTTRNAVRECLNGTWASRINYSCEPILDKQRYDHLHYRIALIN 120
XX XX
QY 121 YLGHCVSVVAAVLAFLFLVLSIRCLRNVIHWNLTITFILRNITWFLQLIDHEVHSGN 180
DB 121 YLGHCVSVVAAVLAFLFLVLSIRCLRNVIHWNLTITFILRNITWFLQLIDHEVHSGN 180
XX XX
QY 181 EYWCRCVTTINNYFVVTNPFMMFVEGCYLHTAIWVTYSTEHRLKMLFLFIGMCIPCIIV 240
DB 181 EYWCRCVTTINNYFVVTNPFMMFVEGCYLHTAIWVTYSTEHRLKMLFLFIGMCIPCIIV 240
XX XX
QY 241 AMAVGKLYYENBQCFGKEPGDLVDYIYQGPILIVLLINFVFLFNIVIRILMTKLRASSTS 300
DB 241 AMAVGKLYYENBQCFGKEPGDLVDYIYQGPILIVLLINFVFLFNIVIRILMTKLRASSTS 300
XX XX
QY 301 ETIQYRKAVKATLVLLPLIGITYMLFFVNPGBDDLSQIVFIYFNSFLQSFQGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLIGITYMLFFVNPGBDDLSQIVFIYFNSFLQSFQGFVSVFYC 360
XX XX
QY 361 FFNGEVSALRKRMHRMODHALLRVVARANSIPTSPRISFHSIKQTAAY 411
DB 361 FFNGEVSALRKRMHRMODHALLRVVARANSIPTSPRISFHSIKQTAAY 411
XX XX
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ID	AA	Score	DB	Length	Indels	Gaps
DB	361	FFNGEVRSAAVKRRMRHMODHHSLSRVPMARAMSIPSPRIRISHSIKOTAAV	411			
RESULT 6						
AAAB71867						
DT	03-MAY-2001	(first entry)				
XX	AAAB71867;					
XX	Human CRF2 seven transmembrane domain.					
XX	Human CRF2; corticotropin releasing factor receptor 2; h15571;					
XX	immunomodulatory; vascular; hepatic; antiallergia; antitubercular;					
XX	antitubercular; immunosuppressive; gene therapy; vaccine;					
XX	G-protein coupled receptor; GPCR; liver fibrosis; respiratory disorder;					
XX	infection; chronic inflammatory disease; organ-specific autoimmunity;					
XX	graft rejection; cystic fibrosis.					
XX	Homo sapiens.					
XX	MO200109328-A1.					
XX	08-FEB-2001.					
XX	03-AUG-2000; 2000MO-US021278.					
XX	03-AUG-1999; 99US-0146916P.					
XX	29-FEB-2000; 2000US-00515781.					
XX	(MILL-) MILLENNIUM PHARM INC.					
XX	Hodge MR, Lloyd C, Welch NS;					
XX	WPI; 2001-138653/14.					
XX	Nucleic acid encoding a G-prot. coupled receptor polypeptides, useful					
XX	for preventing, diagnosing and treating, e.g. liver fibrosis and asthma.					
XX	Disclosure; Fig 2; 145pp; English.					
XX	The present sequence is a human G-protein coupled receptor (GPCR) used					
XX	for comparison with the seven transmembrane domain of a novel GPCR					
XX	designated h15571. h15571 GPCR polynucleotides and polypeptides may be					
XX	used in the prevention, treatment and diagnosis of diseases associated					
XX	with inappropriate GPCR expression. Such diseases includes immune,					
XX	haematological, fibrotic, hepatic and respiratory disorders including					
XX	asthma, allergies (e.g. allergic rhinitis and psoriasis), pathogenic					
XX	infections, chronic inflammatory diseases, organ-specific autoimmunity,					
XX	graft rejection, graft versus host disease, cystic fibrosis and, in					
XX	particular, liver fibrosis. The GPCR polypeptides may be used as antigens					
XX	in the production of antibodies against GPCR and in assays to identify					
XX	modulators (agonists and antagonists) of GPCR expression and activity.					
XX	The anti-GPCR antibodies and GPCR antagonists may also be used to down					
XX	regulate GPCR expression and activity. The anti-GPCR antibodies may be					
XX	used as diagnostic agents for detecting the presence of GPCR polypeptides					
XX	in samples					
XX	Sequence 411 AA;					
XX	Query Match 94.7%; Score 2111; DB 4; Length 411;					
XX	Best Local Similarity 93.9%; Pred. No. 1,3e-200;					
XX	Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0					
XX	1 MDALLLSLLEANSCLALAEELLDDGGEPPPEGGYSYSCNTLLDIGTCWPOSAPGALV 60					
XX	1 MDAAHLHSLLLEANSCLALAEELLDDGGEPPPEGGYSYSCNTLLDIGTCWPSAAGALV 60					
XX	61 BRPCEYFNFGVYNTTRNAYRECLENGTMASRINYSHGCPILLDDKRRKVDLHRIALLN 120					
XX	61 BRPCEYFNFGVYNTTRNAYRECLENGTMASRINYSHGCPILLDDKRRKVDLHRIALLN 120					

Oy		121	YLGHCVSVALVLAFLLEFLVLRSLRCRNVIHNMILITTFILRNTWFLQIDHEVHEGN	180
Db		121	YLGHCVSVALVAFLFLPLALRSIRCLRNVIIHMLITFFILRNVMELQLVDHEVHESN	180
Oy		181	EWMRCTTTIFENYVVVNPFMMVEGCGYLTAIVMTYSTHLRKMLFLFIGMCIIPCLIV	240
Db		181	EWMRCITTTIFNRYVVVNPFMMFPEGGLYHTAIIMTSTERLRCFLFIQMCIPFLIIV	240
Oy		241	AMAVGKLYYENEQCWFGEKEPEDLDVYYOCPILLVLINFPFLFNIRIILMTKLRASTTS	300
Db		241	AMAIGKLYYENECWCFGEKEPEDLDVYYOGPIILLVLINFEVFLFNIRIILMTKLRASTTS	300
Oy		301	ETIOYRAVKATIVLLPLGITWLFPVNPGEDLSQIVFIYFNSPLOSFOGFVSVFYC	360
Db		301	ETIORAARVKTLLPLPLGITTWLFVYNPEEDLSQIMFIYFNSPLOSFOGFVSVFYC	360
Oy		361	FFNGEVRSA LRKRWHRMODHHALREVPARAMS IPTSPTRIS FHSIKOTAAV	411
Db		361	FFNEEVASARKRWHRMODHSLRVPARAMS IPTSPTRIS FHSIKOTAAV	411
RESULT 7				
ID	ADC86183	standard; protein; 411 AA.		
XX	ADC86183;			
AC	ADC86183;			
DT	01-JAN-2004	(first entry)		
DE	Human GPCR protein SEQ ID NO:636.			
KW	human; GPCR; guanosine triphosphate-binding protein coupled receptor;			
XX	gene therapy.			
OS	Homo sapiens.			
PN	EPI270724-A2.			
PD	02-JAN-2003.			
PF	18-JUN-2002; 2002EP-00013517.			
PR	18-JUN-2001; 2001JP-00246789.			
PA	(NAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.			
PA	(ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCBATIO.			
PI	Suwa M., Asai K., Akiyama Y., Aburatani H;			
DR	N-PDBJ; ADC86182.			
PT	New polynucleotide, useful for preparing a composition for treating a			
PT	patient in need of increased or suppressed activity or expression of the			
PS	guanosine triphosphate-binding protein coupled receptor.			
CC	Claim 2; SEQ ID NO 636; 28pp; English.			
CC	The invention relates to a novel polynucleotide encoding a guanosine			
CC	triphosphate-binding protein coupled receptor (GPCR). A polynucleotide of			
CC	the invention may have a use in gene therapy. The polynucleotide and			
CC	polypeptide are useful for preparing a composition for treating a patient			
CC	in need of increased or suppressed activity or expression of the			
CC	guanosine triphosphate-binding protein coupled receptor. The protein			
CC	sequences shown in ADC85549-ADC87617 represent GPCR's of the invention.			
XX	Sequence 411 AA;			
Query Match	94.7%; Score 2111; DB 7; Length 411;			
Best Local Similarity	93.9%; Pred. No. 1.3e-200;			
Matches	386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;			

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Db      1 MDALLHSLSLANCSLALAEELLLDGMPPLDPEGPYSYCNITLDQIGTCWPRSAAGLV 60
Oy      61 ERPCPEYNGIKYNTTRNAVRECLENGWASRINYSHCEPILDDKORKYDLHYRIALIN 120
Db      61 ERPCPEYNGVAVNTTRNAVRECLENGWASKINYSQCEPILDDKORKYDLHYRIALV 120
Oy      121 YLGHCVSVAALVAALFLPLVLRISIRCLRNVIHWNLTITFILNVTWFLQLIDHEVHGN 180
Db      121 YLGHCVSVAALVAALFLPLVLRISIRCLRNVIHWNLTITFILNVTWFLQLIDHEVHGN 180
Oy      181 EVMGRCVTTINNYFVNTNFMFVFGCYLHAIWNTYSTERLKRKLPLFIQWCIPIPIV 240
Db      181 EVMGRCVTTINNYFVNTNFMFVFGCYLHAIWNTYSTERLKRKLPLFIQWCIPIPIV 240
Oy      241 AMAVAGKLYYENQCFKPEKPGDLVDYIYQGPILVLLINVFVLFNIVILMTKLRASSTS 300
Db      241 AMAVAGKLYYENQCFKPEKPGDLVDYIYQGPILVLLINVFVLFNIVILMTKLRASSTS 300
Oy      301 ETIQKRAVKATLVLLPLIGITVYMLFPVNPGEEDLSQIVFIYNSFLOSFGCFVSVYC 360
Db      301 ETIQKRAVKATLVLLPLIGITVYMLFPVNPGEEDLSQIVFIYNSFLOSFGCFVSVYC 360
Oy      361 FFNGEVSASALKRWRHMODHSLRVPMARAMSIFTSPTRISFHSIKOTAAV 411
Db      361 FFNGEVSASALKRWRHMODHSLRVPMARAMSIFTSPTRISFHSIKOTAAV 411

RESULT 8
ADO29267
ID      ADO29267 standard; protein; 411 AA.
AC      ADO29267;
XX      ADO29267;
XX      29-JUL-2004 (first entry)
XX      Human GPCR CRRH2, SEQ ID NO:368.
XX      DE
XX      G protein-coupled receptor; GPCR; drug screening; diagnosis;
XX      transgenic mouse; neurological disorder; adrenal gland disorder;
XX      colon disorder; intestinal disorder; cardiovascular disorder;
XX      muscular disorder; blood disorder; immune disorder; bone disorder;
XX      joint disorder; metabolic disorder; nutritive disorder; cancer;
XX      kidney disorder; liver disorder; lung disorder; breast disorder;
XX      ovary disorder; uterus disorder; prostate disorder; testis disorder;
XX      skin disorder; stomach disorder; pancreas disorder; spleen disorder;
XX      thymus disorder; thyroid disorder; antiparkinsonian; antianemic;
XX      cytosolic; antiinflammatory; vasotropic; antidiarrhoeic; antidiabetic;
XX      CNS; central nervous system; respiratory; antidiarrhoeic; antidiabetic;
XX      vitaminic; hepatotropic; antibacterial; antianemic; antidiarrhoeic;
XX      dermatological; antitumor; antithyroid; antiallergic; anorectic;
XX      immunosuppressive; nephrotropic; gene therapy; GPCR modulator; human;
XX      receptor.
XX      OS
XX      Homo sapiens.
XX      PN
XX      WO2004040000-A2.
XX      13-MAY-2004.
XX      PD
XX      09-SEP-2003; 2003WO-US028226.
XX      PR
XX      09-SEP-2002; 2002US-0409303P.
XX      PR
XX      09-APR-2003; 2003US-0461329P.
XX      PA
XX      (PRIM-) PRIMAL INC.
XX      PI
XX      Galitanaris GA, Bergmann JE, Gragerov A, Holmann J, Li F,
XX      Madisen L, McIlwain KL, Pavlova MN, Vassiliadis D, Zeng H,
XX      DR
XX      WPI: 2004-390329/36.
XX      N-PSDB; ADO29852.

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PT      Novel mammalian G protein coupled receptors, useful for identifying
PT      compounds that modulates diagnosing and treating disease condition
PT      associated with GPCR dysfunction e.g. autoimmune diseases, angina
PT      pectoris, Parkinson's disease.
PS      Claim 151; SEQ ID NO 368; 542pp; English.
XX
XX      The invention relates to human and mouse G protein-coupled receptors
XX      (GPCRs) and nucleic acids encoding to them. The invention also relates to
XX      sequences at least 90% identical to the GPCR proteins and nucleic acids
XX      of the invention; methods of treating, preventing or diagnosing diseases
XX      associated with GPCRs or the invention; methods of screening for
XX      compounds useful in the treatment of GPCR-related diseases; a transgenic
XX      mouse comprising a GPCR gene of the invention; a mouse comprising a
XX      mutation in a GPCR transgene or in an endogenous GPCR gene; cells derived
XX      from the transgenic mice; kits comprising several mice, each of which has
XX      a mutation in a different GPCR gene of the invention; and kits comprising
XX      probes which hybridise to GPCR polynucleotides of the invention. The
XX      invention further discloses variants of the GPCR polypeptides and vectors
XX      comprising a GPCR nucleic acid. The GPCR nucleic acids and proteins may
XX      be used in the diagnosis, treatment or prevention of a wide variety of
XX      diseases including neurological disorders (e.g., Alzheimer's disease,
XX      depression, diabetic neuropathy, Parkinson's disease or schizophrenia);
XX      disorders of the adrenal gland; disorders of the colon or intestine
XX      (e.g., Crohn's disease, diarrhoea, food poisoning or irritable bowel
XX      syndrome); cardiovascular disorders (e.g., angina, cardiac arrhythmia or
XX      myocardial infarction); muscular disorders; blood disorders (e.g.,
XX      anaemia or leukaemia); immune disorders (e.g., autoimmune disorders or
XX      AIDS); bone and joint disorders (e.g., osteoarthritis, rheumatoid
XX      arthritis, gout or osteoporosis); metabolic or nutritive disorders (e.g.,
XX      obesity, enzyme deficiency-related diseases or vitamin deficiency-related
XX      diseases); and disorders of the kidney, liver, lung, breast, ovary,
XX      uterus, prostate, testis, skin, stomach, pancreas, spleen, thymus and
XX      thyroid (e.g., cancers). The present sequence represents a GPCR of the
XX      invention. Note: The full sequence data for this patent did not form part
XX      of the printed specification; those sequences not shown were obtained in
XX      electronic format directly from WIP0 at
XX      ftp.wipo.int/pub/published_pct_sequences.
XX
XX      Sequence 411 AA;
SQ
Query Match      94.7%; Score 2111; DB 8; Length 411;
Best Local Similarity 93.9%; Pred. No. 1.3e-20;
Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;
Oy      1 MDALLHSLSLANCSLALAEELLLDGMPPEGPYSYCNITLDQIGTCWPOSAGLV 60
Db      1 MDALLHSLSLANCSLALAEELLLDGMPPLDPEGPYSYCNITLDQIGTCWPRSAAGLV 60
Oy      61 ERPCPEYNGIKYNTTRNAVRECLENGWASRINYSHCEPILDDKORKYDLHYRIALIN 120
Db      61 ERPCPEYNGVAVNTTRNAVRECLENGWASKINYSQCEPILDDKORKYDLHYRIALV 120
Oy      121 YLGHCVSVAALVAALFLPLVLRISIRCLRNVIHWNLTITFILNVTWFLQLIDHEVHGN 180
Db      121 YLGHCVSVAALVAALFLPLVLRISIRCLRNVIHWNLTITFILNVTWFLQLIDHEVHGN 180
Oy      181 EVMGRCVTTINNYFVNTNFMFVFGCYLHAIWNTYSTERLKRKLPLFIQWCIPIPIV 240
Db      181 EVMGRCVTTINNYFVNTNFMFVFGCYLHAIWNTYSTERLKRKLPLFIQWCIPIPIV 240
Oy      241 AMAVAGKLYYENQCFKPEKPGDLVDYIYQGPILVLLINVFVLFNIVILMTKLRASSTS 300
Db      241 AMAVAGKLYYENQCFKPEKPGDLVDYIYQGPILVLLINVFVLFNIVILMTKLRASSTS 300
Oy      301 ETIQKRAVKATLVLLPLIGITVYMLFPVNPGEEDLSQIVFIYNSFLOSFGCFVSVYC 360
Db      301 ETIQKRAVKATLVLLPLIGITVYMLFPVNPGEEDLSQIVFIYNSFLOSFGCFVSVYC 360
Oy      361 FFNGEVSASALKRWRHMODHSLRVPMARAMSIFTSPTRISFHSIKOTAAV 411
Db      361 FFNGEVSASALKRWRHMODHSLRVPMARAMSIFTSPTRISFHSIKOTAAV 411

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RESULT 9
AAR90576
ID AAR90576 standard; protein; 411 AA.
XX
AC AAR90576;
XX
DT 08-APR-1996 (first entry)
XX
DE Human CRF2 receptor.
XX
KW CRF2 receptor; corticotropin-releasing factor-2 receptor;
XX cerebrovascular disorder; memory disorder; Alzheimer disease.
XX
OS Homo sapiens.
XX
PN MO9514651-A2.
XX
PD 21-DEC-1995.
XX
PF 14-JUN-1995; 95WO-US007757.
XX
PR 14-JUN-1994; 94US-00259959.
XX 31-JAN-1995; 95US-00381433.
XX 07-JUN-1995; 95US-00485984.
XX
PA (NEUR-) NEUROCRINE BIOSCIENCES INC.
XX
PI Chalmers D, Lovenberg TW, Oltersdorf T, Liaw CW, Grigoriadis DE;
PI De Souza EB;
XX
DR MPI; 1996-049680/05.
XX
DR N-PSDB; AAT12247.
XX
PT Corticotropin-releasing factor-2 receptor, and DNA encoding it - used to
PT isolate CRF-2 receptor antagonists for the treatment of cerebrovascular
PT disorders, memory disorders and Alzheimer's disease.
XX
PS Disclosure; Page 80-82; 109pp; English.
XX
XX Human corticotropin-releasing factor-2 (CRF2) receptor (AAR90576) is a
XX membrane-bound G-coupled protein receptor involved in signal
XX transduction. It can be produced by expression of encoding cDNA
XX (AAT12247) in prokaryotic or eucaryotic host cells. Recombinant CRF2
XX receptor is used to screen CRF2 receptor agonists and antagonists of
XX therapeutic appln., and to prepare antibodies which specifically bind to
XX CRF2 receptors
XX
SQ Sequence 411 AA;
XX
Query Match 94.5%; Score 2106; DB 2; Length 411;
Best Local Similarity 93.7%; Pred. No. 3.9e-200;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
QY 1 MDAALLSLLEAÑCSIALAEELLDDGMPDEPGYSYCNLTLDQIGTCWPSAGALV 60
DB 1 MDAALLSLLEAÑCSIALAEELLDDGMPDEPGYSYCNLTLDQIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIN 120
QY 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIN 120
QY 121 YGHCVSVALVAALFLPLVLRISIRCLRVNIHNNLTFTFLRNITWFLQLIDHEVHEGN 180
DB 121 YGHCVSVALVAALFLPLVLRISIRCLRVNIHNNLTFTFLRNITWFLQLIDHEVHEGN 180
QY 181 EVMCRCTTITFNFVVTNPFMWFVEGCYLTATVMTYSTELRKMLFLFIWMCIPQPIIV 240
DB 181 EVMCRCTTITFNFVVTNPFMWFVEGCYLTATVMTYSTELRKMLFLFIWMCIPQPIIV 240
QY 241 AAVAGKLYIENECQMGKEPGLVDYIYOGPIILVLLINFLVFNIVIRIIMTKLRASSTS 300
DB 241 AAVAGKLYIENECQMGKEPGLVDYIYOGPIILVLLINFLVFNIVIRIIMTKLRASSTS 300

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RESULT 10
AAO19424
ID AAO19424 standard; protein; 411 AA.
XX
AC AAO19424;
XX
DT 10-DEC-2002 (first entry)
XX
DE Human corticotrophin releasing factor receptor CRF2Ralpha.
XX
KW Human; rat; mouse; sheep; cow; chicken; CRF1R; CRF2R;
KW skeletal muscle atrophy; corticotrophin releasing factor-2 receptor;
KW muscular dystrophy; corticotrophin releasing factor-1 receptor;
KW gene therapy.
XX
OS Homo sapiens.
XX
PN MO200269908-A2.
XX
PD 12-SEP-2002.
XX
PF 06-MAR-2002; 2002WO-US007476.
XX
PR 06-MAR-2001; 2001US-00799978.
XX
PA (PROC) PROCTER & GAMBLE CO.
XX
PI Isfort RJ, Sheldon RJ;
XX
DR MPI; 2002-713413/77.
XX
DR N-PSDB; AAL49975.
XX
PT Identifying candidate compounds for regulating skeletal muscle mass or
PT treating skeletal muscle atrophy by identifying test compounds that bind
PT to, or activate, the corticotropin releasing factor-2 receptor.
XX
PS Claim 7; Page 95-97; 167pp; English.
XX
XX The present invention relates to a method of identifying candidate
XX compounds for regulating skeletal muscle mass or function, and comprises
XX contacting a test compound with a corticotropin releasing factor-2
XX receptor (CRF2R) or with a cell expressing a functional CRF2R, the CRF2R
XX determining whether the test compound binds to, or activates, the CRF2R
XX and identifying the test compounds that bind to, or activates, the CRF2R
XX as candidate compounds for regulating skeletal muscle mass or function.
XX The method is useful for preparing a medicament for treating skeletal
XX muscle atrophy or for prophylactic treatment of muscular dystrophies. The
XX present sequence is a corticotropin releasing factor receptor
XX
SQ Sequence 411 AA;
XX
Query Match 94.5%; Score 2106; DB 5; Length 411;
Best Local Similarity 93.7%; Pred. No. 3.9e-200;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
QY 1 MDAALLSLLEAÑCSIALAEELLDDGMPDEPGYSYCNLTLDQIGTCWPSAGALV 60
DB 1 MDAALLSLLEAÑCSIALAEELLDDGMPDEPGYSYCNLTLDQIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTTRNAYRECLNGTWASRINSHCEPIIDDKORKYDLHYRIALIN 120

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QY 121 YLGHCVSAVAALVAAPFLVLRISICLRNVTHMNLITPFLINNTWFLQLIDHVEHGN 180
DB 121 YLGHCVSAVAALVAAPFLVLRISICLRNVTHMNLITPFLINNTWFLQLIDHVEHGN 180
QY 181 EVMCRVTTTFNFYVVTNPFMMFVEGCVLHTAIWMTYSTEHRLKMLFPIGMCIPCIIV 240
DB 181 EVMCRVTTTFNFYVVTNPFMMFVEGCVLHTAIWMTYSTEHRLKMLFPIGMCIPCIIV 240
QY 241 AMAVSKLYYENECQCFGKEPBDLVYIYOGPIILVLLINFVELFENIVRLMTKLRASSTS 300
DB 241 AMAVSKLYYENECQCFGKEPBDLVYIYOGPIILVLLINFVELFENIVRLMTKLRASSTS 300
QY 301 ETIOYRKAVKATLVLLPLIGITVLMFPVNPGEDDLQIVFIYFNSFLQSFQGFVSVFYC 360
DB 301 ETIOYRKAVKATLVLLPLIGITVLMFPVNPGEDDLQIVFIYFNSFLQSFQGFVSVFYC 360
QY 361 FFNGEVSASLRKRWHRMODHHLRVVAVARAMSIFTSPTRISFHSIKQTAAY 411
DB 361 FFNGEVSASLRKRWHRMODHHLRVVAVARAMSIFTSPTRISFHSIKQTAAY 411
RESULT 11
ABP81806
ID ABP81806 standard; protein; 411 AA.
XX
AC ABP81806;
XX
DT 04-MAR-2003 (first entry)
XX
DE Human corticotropin releasing factor receptor 2 protein SEQ ID NO:96.
XX
KM G protein-coupled receptor; GPCR; antigenic peptide; gene therapy;
KM G protein-coupled receptor modulator; antibody; immune-related disease;
KM growth-related disease; cell regeneration-related disease; AIDS; cancer;
KM immunological-related cell proliferative disease; autoimmune disease;
KM Alzheimer's disease; atherosclerosis; infection; osteoarthritis; allergy;
KM osteoporosis; cardiomyopathy; inflammation; Crohn's disease; diabetes;
KM graft versus host disease; Parkinson's disease; multiple sclerosis; pain;
KM psoriasis; anxiety; depression; schizophrenia; dementia; memory loss;
KM mental retardation; epilepsy; asthma; tuberculosis; obesity; nausea;
KM hypertension; hypotension; renal disorder; rheumatoid arthritis; trauma;
KM ulcer.
XX
OS Homo sapiens.
XX
PN WO200261087-A2.
XX
PD 08-AUG-2002.
XX
PF 19-DEC-2001; 2001WO-US050107.
XX
PR 19-DEC-2000; 2000US-0257144P.
XX
PA (LIFE-) LIFESPAN BIOSCIENCES INC.
XX
PI Burner GC, Roush CL, Brown JP;
XX
DR MPI, 2003-046718/04.
XX
DR N-PSDB; ABZ42652.
XX
PT New isolated antigenic peptides e.g., for G protein-coupled receptors
PT (GPCR), useful for diagnosing and designing drugs for treating conditions
PT in which GPCRs are involved, e.g. AIDS, Alzheimer's disease, cancer or
PT autoimmune diseases.
XX
PS Disclosure; Fig 1; 523pp; English.
XX
CC The present invention describes antigenic peptides (I) comprising: (a)
CC any one of 1601 sequences (see ABP82019 to ABP8319) of 12-24 amino
CC acids. Also described: (1) an assay for the detection of a particular G
CC protein-coupled receptor (GPCR) or a candidate polypeptide in a sample;
CC and (2) an isolated antibody having high specificity and high affinity or
CC avidity for a particular GPCR. (I) can be used as GPCR modulators and in

CC gene therapy. The antigenic peptides for GPCRs are useful in detecting an
CC antibody against a particular GPCR, and in the production of specific
CC antibodies. The peptides and antibodies are also useful for detecting the
CC presence or absence of corresponding GPCRs. The antigenic peptides for
CC GPCRs and antibodies are useful for diagnosing and designing drugs for
CC treating immune-related diseases, growth-related diseases, cell
CC regeneration-related disease, immunological-related cell proliferative
CC diseases, or autoimmune diseases, e.g. AIDS, Alzheimer's disease,
CC atherosclerosis, bacteremia, fungal, protozoan or viral infections,
CC osteoarthritis, osteoporosis, cancer, cardiomyopathy, chronic and acute
CC inflammation, allergies, Crohn's disease, diabetes, graft versus host
CC disease, Parkinson's disease, multiple sclerosis, pain, psoriasis,
CC anxiety, depression, schizophrenia, dementia, mental retardation, memory
CC loss, epilepsy, asthma, tuberculosis, obesity, nausea, hypertension,
CC hypotension, renal disorders, rheumatoid arthritis, trauma, ulcers, or
CC any other disorder in which GPCRs are involved. The antibodies may be
CC used in immunoassays and immunodiagnosis. ABZ42523 to ABZ42869 encode
CC GPCR proteins given in ABP81675 to ABP82018, which are used in the
CC exemplification of the present invention
XX
SQ Sequence 411 AA;
XX
Query Match 94.5%; Score 2106; DB 6; Length 411;
Best Local Similarity 93.7%; Pred. No. 3.9e-200;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
QY 1 MDALLLSILRANCSLALAEELLDGWEPPDPPEGPYSYCTTLDQIGTCWPOSAGALV 60
DB 1 MDALLLSILRANCSLALAEELLDGWEPPDPPEGPYSYCTTLDQIGTCWPOSAGALV 60
QY 61 ERPCPEYNGIKNTTTRNAVRECLENGWASRINYSHEPILDDKORKYDHYRIALIIIN 120
DB 61 ERPCPEYNGIKNTTTRNAVRECLENGWASRINYSHEPILDDKORKYDHYRIALIIIN 120
QY 121 YLGHCVSAVAALVAAPFLVLRISICLRNVTHMNLITPFLINNTWFLQLIDHVEHGN 180
DB 121 YLGHCVSAVAALVAAPFLVLRISICLRNVTHMNLITPFLINNTWFLQLIDHVEHGN 180
QY 181 EVMCRVTTTFNFYVVTNPFMMFVEGCVLHTAIWMTYSTEHRLKMLFPIGMCIPCIIV 240
DB 181 EVMCRVTTTFNFYVVTNPFMMFVEGCVLHTAIWMTYSTEHRLKMLFPIGMCIPCIIV 240
QY 241 AMAVSKLYYENECQCFGKEPBDLVYIYOGPIILVLLINFVELFENIVRLMTKLRASSTS 300
DB 241 AMAVSKLYYENECQCFGKEPBDLVYIYOGPIILVLLINFVELFENIVRLMTKLRASSTS 300
QY 301 ETIOYRKAVKATLVLLPLIGITVLMFPVNPGEDDLQIVFIYFNSFLQSFQGFVSVFYC 360
DB 301 ETIOYRKAVKATLVLLPLIGITVLMFPVNPGEDDLQIVFIYFNSFLQSFQGFVSVFYC 360
QY 361 FFNGEVSASLRKRWHRMODHHLRVVAVARAMSIFTSPTRISFHSIKQTAAY 411
DB 361 FFNGEVSASLRKRWHRMODHHLRVVAVARAMSIFTSPTRISFHSIKQTAAY 411
RESULT 12
ADO50791
ID ADO50791 standard; protein; 411 AA.
XX
AC ADO50791;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human corticotropin releasing factor receptor 2 alpha.
XX
KM Human; receptor; corticotropin releasing factor receptor; CRF1R; CRF2R;
KM skeletal muscle; muscle atrophy; skeletal muscle dystrophy;
KM skeletal muscle hypertrophy; surgery; bed rest; broken bone;
KM infectious disease; AIDS cachexia.
OS Homo sapiens.
XX
PN US2004101911-A1.

XX 27-MAY-2004.
 XX
 XX 27-AUG-2003; 2003US-00649852.
 XX
 XX 06-MAR-2001; 2001US-00799978.
 XX
 XX (PROC) PROCTER & GAMBLE CO.
 XX
 XX Isfort RJ, Sheldon RJ;
 XX
 XX MPI: 2004-459890/43.
 XX
 XX N-PSDB; AD050790.
 XX
 XX Identifying compounds for regulating skeletal muscle mass or function, by
 XX contacting test compound with vertebrate corticotropin releasing factor2
 XX receptors (CRF2R), selecting compounds that bind or activate CRF2R.
 XX
 XX Claim 3; SEQ ID NO 10; 100pp; English.
 XX
 XX The invention relates to identifying candidate compounds for regulating
 XX skeletal muscle mass or function, comprising contacting a test compound
 XX with vertebrate corticotropin releasing factor 2 receptors (CRF 2 R),
 XX determining if the compound binds to or activates CRF2R, selecting
 XX compounds that bind or activate CRF 2 R, and determining if compound
 XX increases muscle mass or function in muscle atrophy model. Also included
 XX are identifying candidate therapeutic compounds from a group of one or
 XX more candidate compounds which have been previously determined to bind to
 XX or activate a vertebrate CRF 2 R (comprising administering the candidate
 XX compound to a non-human animal and determining whether the candidate
 XX compound regulates skeletal muscle mass or function in the treated
 XX animal), increasing skeletal muscle mass or function in a subject in
 XX which such an increase is desirable (comprising identifying a subject in
 XX which an increase in muscle mass or function is desirable and
 XX administering to the subject a safe and effective amount of a CRF 2 R
 XX agonist), a purified antibody specific for a CRF2R (where the antibody is
 XX a chimeric or human antibody), and a pharmaceutical composition
 XX comprising a safe and effective amount of a CRF2R agonist and carrier.
 XX The methods are useful for identifying candidate compounds for regulating
 XX skeletal muscle mass or function, for increasing skeletal muscle mass or
 XX function (in a subject in which an increase is desirable), for
 XX identifying candidate compounds that are potentially useful in the
 XX treatment of skeletal muscle dystrophy and for identifying compounds that
 XX prolong or augment the agonist-induced activation of CRF2R or of a CRF2R
 XX signal transduction pathway. The compound is useful for treating skeletal
 XX muscle hypertrophy and for modulating skeletal muscle atrophy induced by
 XX e.g. surgery, bed rest, broken bones, infectious disease or AIDS.
 XX Cachexia. The present sequence represents a corticotropin releasing
 XX factor receptor.
 XX
 XX Sequence 411 AA;
 XX
 XX Query Match 94.5%; Score 2106; DB 8; Length 411;
 XX Best Local Similarity 93.7%; Pired. No. 3.9e-200;
 XX Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
 XX
 XX 1 MPAALLSLLEANCSTALABELLLDGMGEPPDEPGYSYCNNTLDDIGTCWPSARGALV 60
 XX |||||
 XX 1 MDALHLSLEBACSLALBELLLDGMGPPLDPEGYSCNTLLDQGTCPMSAAGALV 60
 XX |||||
 XX 61 EBPCEPYENGKIKYNTNNAYRECLNGTWASRINYSCHCEPILDDOKRYDLHYRIALIN 120
 XX |||||
 XX 61 ERRCPEYFNGVKKNTNNAYRECLNGTWASRINYSCHCEPILDDOKRYDLHYRIALV 120
 XX |||||
 XX 121 YGHGCVSVVALVAFLFLVLRISIRCLRVYTHNNLITTFILRVNMFLLQLVHEVHEEN 180
 XX |||||
 XX 121 YGHGCVSVVALVAFLFLVLRISIRCLRVYTHNNLITTFILRVNMFLLQLVHEVHEEN 180
 XX |||||
 XX 181 EWCRCVTTIFNFVVTNPFPMFVEGCVLHTAIVMYSTEHAKMLFLFGWCIPCPITV 240
 XX |||||
 XX 181 EWCRCVTTIFNFVVTNPFPMFVEGCVLHTAIVMYSTERLKKCLFLFGWCIPCPITV 240
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 XX 241 AWAAGKLYENECQWGEKPGDLVDIYOGPIILVLLINFLFNIRVIRIMTKLRATSTS 300

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 DB 301 ETIOYRKAVKATLVLLPLGITYMFLFVNVGEGDDLSQIVFIYFNSFLQSGFPGVSVFYC 360
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 QY 361 FPNGEVRSALRRKRWHRMODHALLRVVPARANSIPSPTRISHSIKQTAAV 411
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 DB 361 FPNGEVRSALRRKRWHRMODHALLRVVPARANSIPSPTRISHSIKQTAAV 411
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 RESULT 13
 AD089168
 ID AD089168 standard; protein; 411 AA.
 AC AD089168;
 XX
 XX 21-OCT-2004 (first entry)
 XX
 XX DE Human urological disorder related protein 2543 SEQ:120.
 XX
 XX KW urological disorder; uropathic; cytostatic; urinary incontinence;
 XX benign prostatic hyperplasia; human.
 XX
 XX OS Homo sapiens.
 XX
 XX PN MO2004065576-A2.
 XX
 XX PD 05-AUG-2004.
 XX
 XX PF 14-JAN-2004; 2004WO-US000750.
 XX
 XX PR 15-JAN-2003; 2003US-0440318P.
 XX
 XX PR 04-FEB-2003; 2003US-0444783P.
 XX
 XX PR 27-MAR-2003; 2003US-0457901P.
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 XX PR 08-MAY-2003; 2003US-0468775P.
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 XX PR 19-MAY-2003; 2003US-0471614P.
 XX
 XX PR 16-JUN-2003; 2003US-0478742P.
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 XX PR 18-JUL-2003; 2003US-0488529P.
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 XX PR 30-JUL-2003; 2003US-0491156P.
 XX
 XX PR 02-SEP-2003; 2003US-0495949P.
 XX
 XX PR 26-SEP-2003; 2003US-0506332P.
 XX
 XX PA (MILL-) MILLENNIUM PHARM INC.
 XX
 XX PI Karichevi V, Silos-Santiago I, Eliasof SD;
 XX
 XX DR MPI: 2004-562167/54.
 XX
 XX DR N-PSDB; AD089167.
 XX
 XX PT Use of polypeptides related to urological disorders, e.g. 44390, 54181,
 XX 211 or for identifying a compound capable of treating a urological
 XX disorder or identifying and treating a subject having a urological
 XX disorder.
 XX
 XX PS Claim 1; SEQ ID NO 120; 542pp; English.
 XX
 XX The present invention describes the use of polypeptides related to
 XX urological disorders for identifying a compound capable of treating a
 XX urological disorder, identifying a subject having a urological disorder,
 XX or treating a subject having a urological disorder. Also described: (1) a
 XX method for identifying a compound capable of treating a urological
 XX disorder; (2) a method for identifying a subject having a urological
 XX disorder; and (3) a method for treating a subject having a urological
 XX disorder. The compound has uropathic and cytostatic activities. The
 XX polypeptides related to urological disorders are useful for identifying a
 XX compound capable of treating a urological disorder, identifying a subject
 XX having a urological disorder, or treating a subject having a urological
 XX disorder. Disorders include urinary incontinence and benign prostatic
 XX hyperplasia. The present sequence represents a human urological disorder
 XX related protein, which is used in the exemplification of the present
 XX invention.

```
XX Sequence 411 AA;
SQ Query Match 94.5%; Score 2106; DB 8; Length 411;
Best Local Similarity 93.7%; Pred. No. 3.9e-200;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDALLLSLEANGSLAAEELLDDGKEPPDPPEGPYSYNTTLDQIGTCWPSAGALV 60
DB 1 MDALLHSLEANGSLAAEELLDDGKEPPDPPEGPYSYNTTLDQIGTCWPSAGALV 60
QY 61 ERPCPEYNGIKYNTTRNAVRECLNGTWASRINSHOEPIILDDKORXYDLHYRIALLIN 120
DB 61 ERPCPEYNGIKYNTTRNAVRECLNGTWASRINSHOEPIILDDKORXYDLHYRIALLIN 120
QY 121 YLGHCVSAVALVAALFLPLIGITVMSIRCLRNVIHNNLITTFILNITWFLQLIDHEVHGN 180
DB 121 YLGHCVSAVALVAALFLPLIGITVMSIRCLRNVIHNNLITTFILNITWFLQLIDHEVHGN 180
QY 181 EVMCRCTVTTFNYFVVTNPFVMEVEGCVLHTAIVMTYSTELHKKMLFLFGMCIPCIIV 240
DB 181 EVMCRCTVTTFNYFVVTNPFVMEVEGCVLHTAIVMTYSTELHKKMLFLFGMCIPCIIV 240
QY 241 AMAVKLVYENQCKEKGEPDLVDYIYOGPIILVLLINPVLEFNIIVRIIMTKLRASSTS 300
DB 241 AMAIKLVYENQCKEKGEPDLVDYIYOGPIILVLLINPVLEFNIIVRIIMTKLRASSTS 300
QY 301 ETIOYRKAVKATLVLLPLIGITVMTFFVNPGEDDLSQLIYFVNSFLOSGFVSVFYC 360
DB 301 ETIOYRKAVKATLVLLPLIGITVMTFFVNPGEDDLSQLIYFVNSFLOSGFVSVFYC 360
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DB 361 PFNGVRSALKRRKRWODHHLRVAVARAMSIPSPTRISFHSIKQTAAY 411

RESULT 14
ABU62364
ID ABU62364 standard; protein; 431 AA.
XX
AC ABU62364;
XX
DT 29-AUG-2003 (first entry)
XX
DE Rat corticotropin release factor receptor, rCRF-R2beta.
XX
KW Corticotropin release factor; receptor; adrenocorticotrophic hormone;
KW ACTH; blood flow; blood pressure; vascular bed; coronary blood flow;
KW inflammation; vascular permeability; CRF-binding protein; parturition;
KW Alzheimer's disease; chronic fatigue syndrome; appetite; alertness; rat;
KW respiratory system; learning performance; depression; anxiety; memory;
KW hypothalamic pituitary adrenal function; endocrine disorder; swelling;
KW central nervous system disorder; CRF; rCRF-R2beta.
XX
OS Rattus sp.
XX
PN US2003032587-A1.
XX
PD 13-FEB-2003.
XX
PF 26-MAR-2001; 2001US-00818009.
XX
PR 13-JUN-1995; 95US-0028444P.
XX
PR 11-AUG-1995; 95US-002223P.
XX
PR 12-JUN-1996; 96WO-US010240.
XX
PR 10-DEC-1997; 97US-00981189.
XX
PA (SALK ) SALK INST BIOLOGICAL STUDIES.
XX
PI Vale MW, Vaughan J, Donaldson CJ, Lewis KA, Sawchenko P;
XX Rivier JEF, Perrin MH;
XX WPI, 1997-077344/07.
```

```
XX
PT Urocortin peptide(s) related to urocensin and corticotropin-releasing
PT factor - for increasing ACTH and beta-endorphin levels, lowering blood
PT pressure and improving mood, memory and learning performance.
PS Disclosure: Page 29-30; 34pp; English.
XX
CC The invention relates to a human urocortin (Ucn) peptide or an analogous
CC sequence having only conservative substitutions to the amino acid
CC residues in it, or an N-terminally shortened fragment of either which is
CC biologically active to increase adrenocorticotrophic hormone (ACTH)
CC production. Human urocortin or its N-terminally shortened antagonist
CC peptide are useful for modifying blood flow and/or blood pressure and is
CC further useful for modulating blood flow in a desired vascular bed. Human
CC urocortin is also useful for increasing coronary blood flow and for
CC decreasing swelling and/or inflammation and/or vascular permeability. A
CC CRF-binding protein blocking compound is useful for increasing the in
CC vivo level of CRF and/or Ucn. The amount of CRF-binding protein blocking
CC compound is sufficient to promote parturition in a pregnant female. The
CC amount of the compound administered is effective so as to result in an
CC increase in free endogenous CRF and/or Ucn in the brain which causes
CC improvement in short to medium term memory in a subject afflicted with
CC Alzheimer's disease, relief from chronic fatigue syndrome, suppression of
CC appetite, stimulation of the respiratory system, improvement in learning
CC performance, improvement in memory, improvement in alertness, reduction
CC of depression and/or lessening of anxiety. The compound is administered
CC so that it reaches the brain. Human urocortin is useful for evaluating
CC hypothalamic pituitary adrenal function in mammals with suspected
CC endocrine or central nervous system pathology. Human urocortin antibodies
CC are useful in diagnostic methods and systems for detecting the level of
CC ucn polypeptide, for immunoaffinity or affinity chromatography
CC purification of Ucn, and also in human therapeutic methods. The present
CC sequence represents the amino acid sequence of the rat corticotropin
CC release factor receptor, rCTF-R2beta
XX
SQ Sequence 431 AA;
Query Match 92.3%; Score 2055.5; DB 2; Length 431;
Best Local Similarity 94.1%; Pred. No. 4.4e-195;
Matches 382; Conservative 1; Mismatches 12; Indels 11; Gaps 1;

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DB 86 EYFNGIKYNTTRNAVRECLNGTWASRINSHOEPIILDDKORXYDLHYRIALLINYLGHG 145
QY 126 VSVVALVAALFLPLIGITVMSIRCLRNVIHNNLITTFILNITWFLQLIDHEVHGNVWCR 185
DB 146 VSVVALVAALFLPLIGITVMSIRCLRNVIHNNLITTFILNITWFLQLIDHEVHGNVWCR 205
QY 186 CVTTTFNYFVVTNPFVMEVEGCVLHTAIVMTYSTELHKKMLFLFGMCIPCIIVAMAVG 245
DB 206 CVTTTFNYFVVTNPFVMEVEGCVLHTAIVMTYSTELHKKMLFLFGMCIPCIIVAMAVG 265
QY 246 KLYYENQCKEKGEPDLVDYIYOGPIILVLLINPVLEFNIIVRIIMTKLRASSTSETIOY 305
DB 266 KLYYENQCKEKGEPDLVDYIYOGPIILVLLINPVLEFNIIVRIIMTKLRASSTSETIOY 325
QY 306 RKAVALTVLLPLIGITVMTFFVNPGEDDLSQLIYFVNSFLOSGFVSVFYCFENGGE 365
DB 326 RKAVALTVLLPLIGITVMTFFVNPGEDDLSQLIYFVNSFLOSGFVSVFYCFENGGE 385
QY 386 VRSALKRKRWODHHLRVAVARAMSIPSPTRISFHSIKQTAAY 431
DB 386 VRSALKRKRWODHHLRVAVARAMSIPSPTRISFHSIKQTAAY 431

RESULT 15
AAR90575
ID AAR90575 standard; protein; 431 AA.
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OM protein - protein search, using sw model

Run on: October 3, 2005, 07:54:29 ; Search time 93 Seconds
(without alignments)
1834.545 Million cell updates/sec

Title: US-10-821-502-4
Perfect score: 2228
Sequence: 1 MDALLSLLEANCSLALAE.....SIFSPTRISFHSIKOTAAV 411

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1846076 seqs, 415116000 residues

Total number of hits satisfying chosen parameters: 1846076

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications AA.*

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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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1	2228	100.0	411	9	US-09-881-401-4
2	2228	100.0	411	10	US-09-818-009-12
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4	2228	100.0	411	16	US-10-649-852-18
5	2228	100.0	411	16	US-10-821-502-4
6	2111	94.7	411	15	US-10-292-798-636
7	2106	94.5	411	9	US-09-881-401-8
8	2106	94.5	411	10	US-09-799-978-10
9	2106	94.5	411	14	US-10-225-567A-96
10	2106	94.5	411	16	US-10-649-852-10
11	2106	94.5	411	16	US-10-821-502-8

12	2106	94.5	411	16	US-10-757-262-120	Sequence 120, App
13	2055.5	92.3	431	9	US-09-881-401-2	Sequence 2, Appl1
14	2055.5	92.3	431	10	US-09-818-009-13	GENERAL INFORMA
15	2055.5	92.3	431	16	US-10-821-502-2	Sequence 20, Appl1
16	2042.5	91.7	431	16	US-09-799-978-20	Sequence 20, Appl1
17	2042.5	91.7	431	16	US-10-649-852-20	Sequence 20, Appl1
18	2026.5	91.0	431	9	US-09-191-724-10	Sequence 10, Appl1
19	2026.5	91.0	431	10	US-09-818-009-11	GENERAL INFORMA
20	2026.5	91.0	431	10	US-09-799-978-24	Sequence 24, Appl
21	2026.5	91.0	431	15	US-10-649-193-10	Sequence 10, Appl
22	2026.5	91.0	431	16	US-10-649-852-24	Sequence 24, Appl
23	1999	89.7	430	9	US-09-853-386-140	Sequence 140, App
24	1999	89.7	430	10	US-09-799-978-26	Sequence 26, Appl
25	1999	89.7	430	16	US-10-649-852-26	Sequence 26, Appl
26	1963	88.1	397	10	US-09-799-978-14	Sequence 14, Appl
27	1963	88.1	397	16	US-10-649-852-14	Sequence 14, Appl
28	1962	88.1	438	10	US-09-799-978-12	Sequence 12, Appl
29	1962	88.1	438	16	US-10-649-852-12	Sequence 12, Appl
30	1962	88.1	438	17	US-10-482-029-178	Sequence 178, App
31	1793	80.5	413	10	US-09-799-978-32	Sequence 32, Appl
32	1793	80.5	413	16	US-10-649-852-32	Sequence 32, Appl
33	1787	80.2	405	10	US-09-799-978-18	Sequence 38, Appl
34	1787	80.2	405	16	US-10-649-852-38	Sequence 38, Appl
35	1593	71.5	420	9	US-09-853-386-129	Sequence 129, App
36	1593	71.5	420	10	US-09-799-978-42	Sequence 42, Appl
37	1593	71.5	420	16	US-10-649-852-42	Sequence 42, Appl
38	1574	70.6	415	9	US-09-191-724-2	Sequence 2, Appl1
39	1574	70.6	415	10	US-09-799-978-2	Sequence 2, Appl1
40	1574	70.6	415	10	US-09-799-978-4	Sequence 4, Appl1
41	1574	70.6	415	14	US-10-242-822B-1	Sequence 1, Appl1
42	1574	70.6	415	15	US-10-649-193-2	Sequence 2, Appl1
43	1574	70.6	415	16	US-10-649-852-2	Sequence 2, Appl1
44	1574	70.6	415	16	US-10-649-852-4	Sequence 4, Appl1
45	1574	70.6	415	16	US-10-450-097-14	Sequence 14, Appl

ALIGNMENTS

RESULT 1
US-09-881-401-4
Sequence 4, Application US/09881401
Patent No. US20020077468A1
GENERAL INFORMATION:
APPLICANT: Lovenberg, Timothy W.
Olensdorf, Tilmann
Llao, Chen
Grigorliadis, Dimitri E.
Chalmers, Derek T.
Desouza, Errol B.
TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed Intellectual Property Law Group
STREET: 701 Fifth Avenue, Suite 6300
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/881,401
FILING DATE: 13-Jun-2001
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Christiansen, William T.
REGISTRATION NUMBER: 44,614
REFERENCE/DOCKET NUMBER: 690068.401C4

TELECOMMUNICATION INFORMATION:
 TELEPHONE: (206) 622-4900
 TELEFAX: (206) 682-6031
 INFORMATION FOR SEQ ID NO: 4:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 411 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 SEQUENCE DESCRIPTION: SEQ ID NO: 4:
 US-09-881-401-4

Query Match 100.0%; Score 2228; DB 9; Length 411;
 Best Local Similarity 100.0%; Pred. No. 4e-198;
 Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAALLSLLEANCSLALAEELLLDGNGEPDPPEGPYSYCTTTDQIGTCWPOSAPGALV 60
 DB 1 MDAALLSLLEANCSLALAEELLLDGNGEPDPPEGPYSYCTTTDQIGTCWPOSAPGALV 60
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 DB 61 ERPCPEYNGIKYNTTRNAYRECLNGTWSARINYSHEPILDDKORKYDLHYRIALIIN 120
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 DB 361 PFNGEVSRLAKRRHMODHALLRVPVARAMSIFTSPTRIHSFKQTAAY 411

RESULT 2
 US-09-818-009-12

GENERAL INFORMATION:
 APPLICANT: THE SALK INSTITUTE FOR BIOLOGICAL STUDIES
 TITLE OF INVENTION: UROCORTIN PEPTIDES
 NUMBER OF SEQUENCES: 19
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: FITCH, EVAN, TABIN & FLANNERY
 STREET: 120 S. LaSalle Street, Suite 1600
 CITY: Chicago
 STATE: Illinois
 COUNTRY: USA
 ZIP: 60603
 COMPUTER READABLE FORM:
 MEDIUM TYPE: floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/818,009
 FILING DATE: 26-Mar-2001
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/981,189
 FILING DATE: 10-DEC-1997
 APPLICATION NUMBER: US 60/028,144
 FILING DATE: 13-JUN-1995
 APPLICATION NUMBER: US 60/002,223
 FILING DATE: 11-AUG-1995

ATTORNEY/AGENT INFORMATION:
 NAME: Schumann, James J.
 REGISTRATION NUMBER: 20,856
 REFERENCE/DOCKET NUMBER: 57611
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 858-552-1311
 TELEFAX: 858-552-0095
 SEQUENCE DESCRIPTION: SEQ ID NO: 12:
 US-09-818-009-12

Query Match 100.0%; Score 2228; DB 10; Length 411;
 Best Local Similarity 100.0%; Pred. No. 4e-198;
 Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAALLSLLEANCSLALAEELLLDGNGEPDPPEGPYSYCTTTDQIGTCWPOSAPGALV 60
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 DB 361 PFNGEVSRLAKRRHMODHALLRVPVARAMSIFTSPTRIHSFKQTAAY 411

RESULT 3
 US-09-799-978-18

Sequence 18, Application US/09799978
 Publication No. US20030165807A1
 GENERAL INFORMATION:
 APPLICANT: The Procter & Gamble Company
 APPLICANT: Isifort, Robert
 APPLICANT: Sheldon, Russell
 TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
 TITLE OF INVENTION: Function Using Corticotropin Releasing Factor Receptors
 FILE REFERENCE: 8448
 CURRENT APPLICATION NUMBER: US/09/799,978
 CURRENT FILING DATE: 2001-03-06
 NUMBER OF SEQ ID NOS: 44
 SOFTWARE: PatentIn version 3.0
 SEQ ID NO 18
 LENGTH: 411
 TYPE: PRT
 ORGANISM: Rattus norvegicus
 US-09-799-978-18

Query Match 100.0%; Score 2228; DB 10; Length 411;
 Best Local Similarity 100.0%; Pred. No. 4e-198;
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QY 181 EVMGRCVTTIFNFVVTNPFWMFVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
Db 181 EVMGRCVTTIFNFVVTNPFWMFVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
QY 241 AMAVGKLYENECQWKEGKGLVDYIYOGPIILVLLINVFLENIVRIIMTLKRASTTS 300
Db 241 AMAVGKLYENECQWKEGKGLVDYIYOGPIILVLLINVFLENIVRIIMTLKRASTTS 300
QY 301 ETIQYKAKAVATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSQGFVSFVYC 360
Db 301 ETIQYKAKAVATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSQGFVSFVYC 360
QY 361 FNGEVSALRKRMHMODHMLRVPARAMSIPTSPTISFHSIKOTAAV 411
Db 361 FNGEVSALRKRMHMODHMLRVPARAMSIPTSPTISFHSIKOTAAV 411

RESULT 4
US-10-649-852-18
; Sequence 18, Application US/10649852
; Publication No. US20040101911A1
; GENERAL INFORMATION:
; APPLICANT: The Procter & Gamble Company
; APPLICANT: Isfort, Robert
; APPLICANT: Sheldon, Russell
; TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or F
; FILE REFERENCE: 8448R
; CURRENT APPLICATION NUMBER: US/10/649,852
; CURRENT FILING DATE: 2003-08-27
; PRIOR APPLICATION NUMBER: US 09/799,978
; PRIOR FILING DATE: 2001-03-06
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 18
; LENGTH: 411
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-10-649-852-18

Query Match 100.0%; Score 2228; DB 16; Length 411;
Best Local Similarity 100.0%; Pred. No. 4e-198;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAAALLSLEANCSTALAEELLLDGMBPDPGPGYSYCNNTLLDQIGTCWPOSAGALV 60
Db 1 MDAAALLSLEANCSTALAEELLLDGMBPDPGPGYSYCNNTLLDQIGTCWPOSAGALV 60
QY 61 ERPCPEYFNGIKNTTRNARRECLNGTWSRINYSCEPILDKOKRYDLHRIALIN 120
Db 61 ERPCPEYFNGIKNTTRNARRECLNGTWSRINYSCEPILDKOKRYDLHRIALIN 120
QY 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHNNLITTFILRNITWFLQLIDHEVEHGN 180
Db 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHNNLITTFILRNITWFLQLIDHEVEHGN 180
QY 181 EVMGRCVTTIFNFVVTNPFWMFVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
Db 181 EVMGRCVTTIFNFVVTNPFWMFVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
QY 241 AMAVGKLYENECQWKEGKGLVDYIYOGPIILVLLINVFLENIVRIIMTLKRASTTS 300
Db 241 AMAVGKLYENECQWKEGKGLVDYIYOGPIILVLLINVFLENIVRIIMTLKRASTTS 300
QY 301 ETIQYKAKAVATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSQGFVSFVYC 360
Db 301 ETIQYKAKAVATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSQGFVSFVYC 360

Db 301 ETIQYKAKAVATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSQGFVSFVYC 360
QY 361 FNGEVSALRKRMHMODHMLRVPARAMSIPTSPTISFHSIKOTAAV 411
Db 361 FNGEVSALRKRMHMODHMLRVPARAMSIPTSPTISFHSIKOTAAV 411

RESULT 5
US-10-821-502-4
; Sequence 4, Application US/10821502
; Publication No. US2004018553A1
; GENERAL INFORMATION:
; APPLICANT: Lovenberg, Timothy W.
; Olensdorf, Tilman
; Liaw, Chen Wang
; Grigoriadis, Dimitri E.
; Chalmers, Derek T.
; Desouza, Erol B.
; TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2
; RECEPTORS
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Seed Intellectual Property Law Group
; STREET: 701 Fifth Avenue, Suite 6300
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/821,502
; FILING DATE: 09-Apr-2004
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Christiansen, William T.
; REGISTRATION NUMBER: 44,614
; REFERENCE/DOCKET NUMBER: 690068,401C5
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 411 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-10-821-502-4

Query Match 100.0%; Score 2228; DB 16; Length 411;
Best Local Similarity 100.0%; Pred. No. 4e-198;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAAALLSLEANCSTALAEELLLDGMBPDPGPGYSYCNNTLLDQIGTCWPOSAGALV 60
Db 1 MDAAALLSLEANCSTALAEELLLDGMBPDPGPGYSYCNNTLLDQIGTCWPOSAGALV 60
QY 61 ERPCPEYFNGIKNTTRNARRECLNGTWSRINYSCEPILDKOKRYDLHRIALIN 120
Db 61 ERPCPEYFNGIKNTTRNARRECLNGTWSRINYSCEPILDKOKRYDLHRIALIN 120
QY 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHNNLITTFILRNITWFLQLIDHEVEHGN 180
Db 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHNNLITTFILRNITWFLQLIDHEVEHGN 180
QY 181 EVMGRCVTTIFNFVVTNPFWMFVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
Db 181 EVMGRCVTTIFNFVVTNPFWMFVEGCGYLHTAIVMTYSTHLRKMLFLFIGWCI PCPIIV 240
QY 241 AMAVGKLYENECQWKEGKGLVDYIYOGPIILVLLINVFLENIVRIIMTLKRASTTS 300
Db 241 AMAVGKLYENECQWKEGKGLVDYIYOGPIILVLLINVFLENIVRIIMTLKRASTTS 300
QY 301 ETIQYKAKAVATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSQGFVSFVYC 360
Db 301 ETIQYKAKAVATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSQGFVSFVYC 360

QY 241 AMAVGKLYYENOCFGKEPGDLDVYIYQGPILVLLINFPFLNIVILMTKLRASSTTS 300
DB 241 AMAVGKLYYENOCFGKEPGDLDVYIYQGPILVLLINFPFLNIVILMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITMYMLFVNPGEDDLSQIVFIYFNSFLQSFQGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLIGITMYMLFVNPGEDDLSQIVFIYFNSFLQSFQGFVSVFYC 360
QY 361 PFNGEVSRLAKRKHWRMODHHLARVPVARAMSIPSPTRISFHSIKQTAAY 411
DB 361 PFNGEVSRLAKRKHWRMODHHLARVPVARAMSIPSPTRISFHSIKQTAAY 411

RESULT 6
US-10-292-798-636
; Sequence 636, Application US/10292798
; Publication No. US20030235833A1
; GENERAL INFORMATION:
; APPLICANT: SUWA, MAKIKO
; APPLICANT: ASAI, KIYOSHI
; APPLICANT: AKIYAMA, YUTAKA
; APPLICANT: ABURATANI, HIROYUKI
; TITLE OF INVENTION: GUANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS
; FILE REFERENCE: 084335/166
; CURRENT APPLICATION NUMBER: US/10/292,798
; PRIOR FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: 10/017,161
; PRIOR FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: JP 2001-246789
; PRIOR FILING DATE: 2001-06-18
; NUMBER OF SEQ ID NOS: 2070
; SOFTWARE: Patent Ver. 2.1
; SEQ ID NO: 636
; LENGTH: 411
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-292-798-636

Query Match 94.7%; Score 2111; DB 15; Length 411;
Best Local Similarity 93.9%; Pred. No. 2.9e-187;
Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;
QY 1 MDALLLSLEANGSLALAEELLDDGKGPDPDPGPGYSYCTTLDQIGTCWPSAAGALV 60
DB 1 MDALLLSLEANGSLALAEELLDDGKGPDPDPGPGYSYCTTLDQIGTCWPSAAGALV 60
QY 61 BRPCEYFNGIKYNTTRNAVRECLENGWASRINYSHCPEILDDKORKYDHLRYALVIN 120
DB 61 BRPCEYFNGIKYNTTRNAVRECLENGWASRINYSHCPEILDDKORKYDHLRYALVIN 120
QY 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLTTFILRNITWFLQLIDHEVHSGN 180
DB 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLTTFILRNITWFLQLIDHEVHSGN 180
QY 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLTTFILRNITWFLQLIDHEVHSGN 180
DB 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLTTFILRNITWFLQLIDHEVHSGN 180
QY 181 EYWCRCVTTINYPVNTNFPMFVFGCYLHTAIWNTYSTELRKMLFLFIQWCIPEPIIV 240
DB 181 EYWCRCVTTINYPVNTNFPMFVFGCYLHTAIWNTYSTELRKMLFLFIQWCIPEPIIV 240
QY 181 EYWCRCVTTINYPVNTNFPMFVFGCYLHTAIWNTYSTELRKMLFLFIQWCIPEPIIV 240
DB 181 EYWCRCVTTINYPVNTNFPMFVFGCYLHTAIWNTYSTELRKMLFLFIQWCIPEPIIV 240
QY 241 AMAVGKLYYENOCFGKEPGDLDVYIYQGPILVLLINFPFLNIVILMTKLRASSTTS 300
DB 241 AMAVGKLYYENOCFGKEPGDLDVYIYQGPILVLLINFPFLNIVILMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITMYMLFVNPGEDDLSQIVFIYFNSFLQSFQGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLIGITMYMLFVNPGEDDLSQIVFIYFNSFLQSFQGFVSVFYC 360
QY 361 PFNGEVSRLAKRKHWRMODHHLARVPVARAMSIPSPTRISFHSIKQTAAY 411
DB 361 PFNGEVSRLAKRKHWRMODHHLARVPVARAMSIPSPTRISFHSIKQTAAY 411

RESULT 7
US-09-881-401-8

; Sequence 8, Application US/09881401
; Patent No. US20020077468A1
; GENERAL INFORMATION:
; APPLICANT: Lovenberg, Timothy W.
; Oltersdorf, Tilman
; Liaw, Chen
; Grigoriadis, Dimitri E.
; Chalmers, Derek T.
; Desouza, Errol B.
; TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2 RECEPTORS
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Seed Intellectual Property Law Group
; STREET: 701 Fifth Avenue, Suite 6300
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/881,401
; FILING DATE: 13-Jun-2001
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Christensen, William T.
; REGISTRATION NUMBER: 44,614
; REFERENCE/DOCKET NUMBER: 690068.401C4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 411 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-09-881-401-8

Query Match 94.5%; Score 2106; DB 9; Length 411;
Best Local Similarity 93.7%; Pred. No. 8.6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
QY 1 MDALLLSLEANGSLALAEELLDDGKGPDPDPGPGYSYCTTLDQIGTCWPSAAGALV 60
DB 1 MDALLLSLEANGSLALAEELLDDGKGPDPDPGPGYSYCTTLDQIGTCWPSAAGALV 60
QY 61 BRPCEYFNGIKYNTTRNAVRECLENGWASRINYSHCPEILDDKORKYDHLRYALVIN 120
DB 61 BRPCEYFNGIKYNTTRNAVRECLENGWASRINYSHCPEILDDKORKYDHLRYALVIN 120
QY 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLTTFILRNITWFLQLIDHEVHSGN 180
DB 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLTTFILRNITWFLQLIDHEVHSGN 180
QY 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLTTFILRNITWFLQLIDHEVHSGN 180
DB 121 YLGHCVSVAALVAALFLFLVLSIRCLRNVIHMNLTTFILRNITWFLQLIDHEVHSGN 180
QY 181 EYWCRCVTTINYPVNTNFPMFVFGCYLHTAIWNTYSTELRKMLFLFIQWCIPEPIIV 240
DB 181 EYWCRCVTTINYPVNTNFPMFVFGCYLHTAIWNTYSTELRKMLFLFIQWCIPEPIIV 240
QY 181 EYWCRCVTTINYPVNTNFPMFVFGCYLHTAIWNTYSTELRKMLFLFIQWCIPEPIIV 240
DB 181 EYWCRCVTTINYPVNTNFPMFVFGCYLHTAIWNTYSTELRKMLFLFIQWCIPEPIIV 240
QY 241 AMAVGKLYYENOCFGKEPGDLDVYIYQGPILVLLINFPFLNIVILMTKLRASSTTS 300
DB 241 AMAVGKLYYENOCFGKEPGDLDVYIYQGPILVLLINFPFLNIVILMTKLRASSTTS 300
QY 301 ETIQYRKAVKATLVLLPLIGITMYMLFVNPGEDDLSQIVFIYFNSFLQSFQGFVSVFYC 360
DB 301 ETIQYRKAVKATLVLLPLIGITMYMLFVNPGEDDLSQIVFIYFNSFLQSFQGFVSVFYC 360
QY 361 PFNGEVSRLAKRKHWRMODHHLARVPVARAMSIPSPTRISFHSIKQTAAY 411
DB 361 PFNGEVSRLAKRKHWRMODHHLARVPVARAMSIPSPTRISFHSIKQTAAY 411

Db 361 FNGEVSASVRRKMRHQDHSLRVPMARAMSIPSPTRISFSHSIKQTAAY 411

RESULT 8

US-09-799-978-10
; Sequence 10, Application US/09799978
; Publication No. US20030165807A1
; GENERAL INFORMATION:
; APPLICANT: The-Procter & Gamble Company
; APPLICANT: Isfort, Robert
; APPLICANT: Sheldon, Russell
; TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
; FILE REFERENCE: 8448
; FILE REFERENCE: Function Using Corticotropin Releasing Factor Receptors
; CURRENT APPLICATION NUMBER: US/09/799,978
; CURRENT FILING DATE: 2001-03-06
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 10
; LENGTH: 411
; TYPE: PRF
; ORGANISM: Homo sapiens
US-09-799-978-10

Query Match 94.5%; Score 2106; DB 10; Length 411;
Best Local Similarity 93.7%; Pred. No. 8,6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDALLLSLLEANCSTALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
DB 1 MDALLLSLLEANCSTALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSHCPIILDDKORKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSHCPIILDDKORKYDLHYRIALIN 120
QY 121 YLGHCVSVALVAAPFLFLVLSIRCLRVHNMNLTTFILRNITWFLQLIDHEVHEGN 180
DB 121 YLGHCVSVALVAAPFLFLVLSIRCLRVHNMNLTTFILRNITWFLQLIDHEVHEGN 180
QY 181 EVMCRCTTIFNYFVVTNFFMFWEGCYLHTAIWMTYSTELRKMLFLFICWCIPPIIV 240
DB 181 EVMCRCTTIFNYFVVTNFFMFWEGCYLHTAIWMTYSTELRKMLFLFICWCIPPIIV 240
QY 241 ANAVGLYYENQCFWKEPGLVDYIYOGPIILVLLINFLVFNIRILMTKLRASSTS 300
DB 241 ANAVGLYYENQCFWKEPGLVDYIYOGPIILVLLINFLVFNIRILMTKLRASSTS 300
QY 301 ETIQYKAVKATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSFOGFVSFYC 360
DB 301 ETIQYKAVKATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSFOGFVSFYC 360
QY 361 FNGEVSASVRRKMRHQDHSLRVPMARAMSIPSPTRISFSHSIKQTAAY 411
DB 361 FNGEVSASVRRKMRHQDHSLRVPMARAMSIPSPTRISFSHSIKQTAAY 411

RESULT 9

US-10-225-567A-96
; Sequence 96, Application US/10225567A
; Publication No. US20030113798A1
; GENERAL INFORMATION:
; APPLICANT: Lifespan Biosciences
; APPLICANT: Brown, Joseph P.
; APPLICANT: Burner, Glenna C.
; APPLICANT: Roush, Christine L.
; TITLE OF INVENTION: ANTIGENIC PEPTIDES AND ANTIBODIES FOR G PROTEIN-COUPLED RECEPTORS
; FILE REFERENCE: 1920-4-4
; CURRENT APPLICATION NUMBER: US/10/225,567A
; CURRENT FILING DATE: 2001-12-19
; PRIOR APPLICATION NUMBER: 60/257,144
; PRIOR FILING DATE: 2000-12-19

; NUMBER OF SEQ ID NOS: 2292
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 96
; LENGTH: 411
; TYPE: PRF
; ORGANISM: Homo sapiens
US-10-225-567A-96

Query Match 94.5%; Score 2106; DB 14; Length 411;
Best Local Similarity 93.7%; Pred. No. 8,6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDALLLSLLEANCSTALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
DB 1 MDALLLSLLEANCSTALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSHCPIILDDKORKYDLHYRIALIN 120
DB 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSHCPIILDDKORKYDLHYRIALIN 120
QY 121 YLGHCVSVALVAAPFLFLVLSIRCLRVHNMNLTTFILRNITWFLQLIDHEVHEGN 180
DB 121 YLGHCVSVALVAAPFLFLVLSIRCLRVHNMNLTTFILRNITWFLQLIDHEVHEGN 180
QY 181 EVMCRCTTIFNYFVVTNFFMFWEGCYLHTAIWMTYSTELRKMLFLFICWCIPPIIV 240
DB 181 EVMCRCTTIFNYFVVTNFFMFWEGCYLHTAIWMTYSTELRKMLFLFICWCIPPIIV 240
QY 241 ANAVGLYYENQCFWKEPGLVDYIYOGPIILVLLINFLVFNIRILMTKLRASSTS 300
DB 241 ANAVGLYYENQCFWKEPGLVDYIYOGPIILVLLINFLVFNIRILMTKLRASSTS 300
QY 301 ETIQYKAVKATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSFOGFVSFYC 360
DB 301 ETIQYKAVKATLVLLPLGITMYLFFVNPGEDDLSQIVFIYNSFLOSFOGFVSFYC 360
QY 361 FNGEVSASVRRKMRHQDHSLRVPMARAMSIPSPTRISFSHSIKQTAAY 411
DB 361 FNGEVSASVRRKMRHQDHSLRVPMARAMSIPSPTRISFSHSIKQTAAY 411

RESULT 10

US-10-649-852-10
; Sequence 10, Application US/10649852
; Publication No. US2004010191A1
; GENERAL INFORMATION:
; APPLICANT: The Procter & Gamble Company
; APPLICANT: Isfort, Robert
; APPLICANT: Sheldon, Russell
; TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
; FILE REFERENCE: 8448R
; CURRENT APPLICATION NUMBER: US/10/649,852
; CURRENT FILING DATE: 2003-08-27
; PRIOR APPLICATION NUMBER: US 09/799,978
; PRIOR FILING DATE: 2001-03-06
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 10
; LENGTH: 411
; TYPE: PRF
; ORGANISM: Homo sapiens
US-10-649-852-10

Query Match 94.5%; Score 2106; DB 16; Length 411;
Best Local Similarity 93.7%; Pred. No. 8,6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDALLLSLLEANCSTALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
DB 1 MDALLLSLLEANCSTALAEELLDDGMBPPDEPGYSYCNNTLDDIGTCWPSAGALV 60
QY 61 ERPCPEYFNGIKYNTTRNAVRECLNGTWASRINYSHCPIILDDKORKYDLHYRIALIN 120

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Db 61 ERPCEYFNGVKNYNTNNAARECELENGTWSKINXSOCEPIILDDKORKYDHLHYALAVN 120
Qy 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQJLIDHEVHEGN 180
Db 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQJLIDHEVHEGN 180
Qy 181 EVMCRCTTTFNFYVVTNPFMMFVEGCVLHTAIVMTYSTELHRLKWLFLFGWCIPCPITV 240
Db 181 EVMCHCITTFITFNFYVVTNPFMMFVEGCVLHTAIVMTYSTELHRLKWLFLFGWCIPCPITV 240
Qy 241 AMAVSKLYENBQCFKPEKPEGLVDYIYQGPILVLLINFPVLFNIVRIIMTKLRASSTS 300
Db 241 AMAIGKLYENBQCFKPEKPEGLVDYIYQGPILVLLINFPVLFNIVRIIMTKLRASSTS 300
Qy 301 ETIOYRKAVKATLVLLPLGITYMLFVNPGEDDLSQIVFIYFNSFLOSFOGPFVSFYC 360
Db 301 ETIOYRKAVKATLVLLPLGITYMLFVNPGEDDLSQIMFIYFNSFLOSFOGPFVSFYC 360
Qy 361 FPNGEVSALRKRMHMODHHLRVVAVRAMSIFTSPTRISEHSIKOTAAV 411
Db 361 FPNGEVSALRKRMHMODHHLRVVAVRAMSIFTSPTRISEHSIKOTAAV 411

```

RESULT 11
US-10-821-502-8
Sequence 8, Application US/10821502
Publication No. US2004018553A1
GENERAL INFORMATION:

APPLICANT: Loveberg, Timothy W.
Oltersdorf, Tilman
Llao, Chen Wang
Grigoradiis, Dimitri E.
Chalmers, Derek T.
Desouza, Erol B.
TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2 RECEPTORS
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed Intellectual Property Law Group
STREET: 701 Fifth Avenue, Suite 6300
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/821,502
FILING DATE: 09-Apr-2004
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Christiansen, William T.
REGISTRATION NUMBER: 44,614
REFERENCE/DOCKET NUMBER: 690068, 401C5
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 411 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-10-821-502-8

Query Match 94.5%; Score 2106; DB 16; Length 411;
Best Local Similarity 93.7%; Pred. No. 8, 6e-187;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

```

Qy 1 MDALLSLLEANCSLALAEELLIDGKPEPPDPYSYCNTTLDIGTCWPOSAPGALV 60
Db 1 MDALLSLLEANCSLALAEELLIDGKPEPPDPYSYCNTTLDIGTCWPOSAPGALV 60
Qy 61 ERPCEYFNGVKNYNTNNAARECELENGTWSKINXSOCEPIILDDKORKYDHLHYALAVN 120
Db 61 ERPCEYFNGVKNYNTNNAARECELENGTWSKINXSOCEPIILDDKORKYDHLHYALAVN 120
Qy 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQJLIDHEVHEGN 180
Db 121 YLGHCVSVALVAAPFLFLVLSIRCLRNVIHMNLITTFILRNITWFLQJLIDHEVHEGN 180
Qy 181 EVMCRCTTTFNFYVVTNPFMMFVEGCVLHTAIVMTYSTELHRLKWLFLFGWCIPCPITV 240
Db 181 EVMCHCITTFITFNFYVVTNPFMMFVEGCVLHTAIVMTYSTELHRLKWLFLFGWCIPCPITV 240
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Db 241 AMAIGKLYENBQCFKPEKPEGLVDYIYQGPILVLLINFPVLFNIVRIIMTKLRASSTS 300
Qy 301 ETIOYRKAVKATLVLLPLGITYMLFVNPGEDDLSQIVFIYFNSFLOSFOGPFVSFYC 360
Db 301 ETIOYRKAVKATLVLLPLGITYMLFVNPGEDDLSQIMFIYFNSFLOSFOGPFVSFYC 360
Qy 361 FPNGEVSALRKRMHMODHHLRVVAVRAMSIFTSPTRISEHSIKOTAAV 411
Db 361 FPNGEVSALRKRMHMODHHLRVVAVRAMSIFTSPTRISEHSIKOTAAV 411

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RESULT 12
US-10-757-262-120
Sequence 120, Application US/10757262
Publication No. US20040197825A1
GENERAL INFORMATION:

APPLICANT: Karichei, Venkateswarlu
Slios-Santiago, Immaculada
APPLICANT: Eliaso, Scott D.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING
TITLE OF INVENTION: UROLOGICAL DISORDERS USING 44390, 54181, 211, 5687, 884,
TITLE OF INVENTION: 1405, 636, 4421, 5410, 30905, 2045, 16405, 18560, 2047,
TITLE OF INVENTION: 33751, 52672, 14063, 20739, 32544, 43239, 44373, 51164,
TITLE OF INVENTION: 53010, 16852, 1587, 2207, 22245, 2387, 52908, 69112, 14990,
TITLE OF INVENTION: 18547, 115, 579, 15985, 15625, 760, 18603, 2395, 2554, 8675,
TITLE OF INVENTION: 32720, 4809, 14303, 16816, 17827, 32620, 577, 619, 1423,
TITLE OF INVENTION: 2158, 8263, 15402, 16209, 16386, 2165, 30911, 41897, 1643,
TITLE OF INVENTION: 2543, 9626, 13231, 32409, 84260, 2882, 8203, 32678 OR
FILE REFERENCE: MP103-007P1RNONMIM
CURRENT APPLICATION NUMBER: US/10/757, 262
CURRENT FILING DATE: 2004-01-14
PRIOR APPLICATION NUMBER: US 60/440,318
PRIOR FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: US 60/444,783
PRIOR FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: US 60/457,901
PRIOR FILING DATE: 2003-03-27
PRIOR APPLICATION NUMBER: US 60/468,775
PRIOR FILING DATE: 2003-05-08
PRIOR APPLICATION NUMBER: US 60/471,614
PRIOR FILING DATE: 2003-05-19
PRIOR APPLICATION NUMBER: US 60/478,742
PRIOR FILING DATE: 2003-06-16
PRIOR APPLICATION NUMBER: US 60/488,529
PRIOR FILING DATE: 2003-07-18
PRIOR APPLICATION NUMBER: US 60/491,156
PRIOR FILING DATE: 2003-07-30
PRIOR APPLICATION NUMBER: US 60/499,594
PRIOR FILING DATE: 2003-09-02
PRIOR APPLICATION NUMBER: US 60/506,332
PRIOR FILING DATE: 2003-09-26
NUMBER OF SEQ ID NOS: 136
SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 120
LENGTH: 411
TYPE: PRT
ORGANISM: Homo sapiens
US-10-757-262-120

Query Match 94.5%; Score 2106; DB 16; Length 411;
Best Local Similarity 93.7%; Pred. No. 8.6e-187;
Matches 395; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

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DB 301 ETIYRKAVKATLVLLPLLGITYMLFVNPGEDDLSQIVFIYNSFLOSFGFVSVPYC 360
QY 361 FENGESVRLARKRMHODHHLRVPARAMSPTSPTSRISFSHISKOTAAV 411
DB 361 FENGESVRLARKRMHODHHLRVPARAMSPTSPTSRISFSHISKOTAAV 411

RESULT 13

US-09-881-401-2
Sequence 2, Application US/09881401
Patent No. US20020077468A1

GENERAL INFORMATION:

APPLICANT: Lovenberg, Timothy W.

Oltersdorf, Tilman

Llsw, Chen

Grigoriadis, Dimitri E.

Chalmers, Derek T.

Desouza, Erol B.

TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2 RECEPTORS

NUMBER OF SEQUENCES: 8

CORRESPONDENCE ADDRESS:

ADDRESSER: Seed Intellectual Property Law Group

STREET: 701 Fifth Avenue, Suite 6300

CITY: Seattle

STATE: Washington

COUNTRY: USA

ZIP: 98104-7092

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

CURRENT APPLICATION DATA: Patentin Releasee #1.0, Version #1.25

APPLICATION NUMBER: US/09/881,401

FILING DATE: 13-Jun-2001

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Christensen, William T.

REGISTRATION NUMBER: 44,614

REFERENCE/DOCKET NUMBER: 690068.401C4

TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-881-401-2

Query Match 92.3%; Score 2055.5; DB 9; Length 431;
Best Local Similarity 94.1%; Pred. No. 4.5e-182;
Matches 382; Conservative 1; Mismatches 12; Indels 11; Gaps 1;

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QY 126 VSVVALVAAFLLFLVLRISIRCLRVNIHWNLTITFILRNITWFLQLIDHEVHEGN 185
DB 146 VSVVALVAAFLLFLVLRISIRCLRVNIHWNLTITFILRNITWFLQLIDHEVHEGN 205
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DB 206 CVTTTFNYFVVTNFFMMFVEGCGYLAHTAIVMTYSTENLRKMLFETGMCIPETIV 265
QY 246 KLYENECWFGKPEGLVDYIYOGPIILVLLINFLFNIVRIIMTKLRASSTSIOY 305
DB 266 KLYENECWFGKPEGLVDYIYOGPIILVLLINFLFNIVRIIMTKLRASSTSIOY 325
QY 306 RAVKATLVLLPLLGITYMLFVNPGEDDLSQIVFIYNSFLOSFGFVSVPYCFCN 365
DB 326 RAVKATLVLLPLLGITYMLFVNPGEDDLSQIVFIYNSFLOSFGFVSVPYCFCN 385
QY 366 VRSALRKRMHODHHLRVPARAMSPTSPTSRISFSHISKOTAAV 411
DB 386 VRSALRKRMHODHHLRVPARAMSPTSPTSRISFSHISKOTAAV 431

RESULT 14

US-09-818-009-13

GENERAL INFORMATION:

APPLICANT: THE SALK INSTITUTE FOR BIOLOGICAL STUDIES

TITLE OF INVENTION: UROCORTIN PEPTIDES

NUMBER OF SEQUENCES: 19

CORRESPONDENCE ADDRESS:

ADDRESSEE: FITCH, EVAN, TABIN & FLANNERY

STREET: 120 S. LaSalle Street, Suite 1600

CITY: Chicago

STATE: Illinois

COUNTRY: USA

ZIP: 60603

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Releasee #1.0, Version #1.30

CURRENT APPLICATION DATA: US/09/818,009

APPLICATION NUMBER: US 08/981,189

FILING DATE: 10-DEC-1997

APPLICATION NUMBER: US 60/028,144

FILING DATE: 13-JUN-1995

APPLICATION NUMBER: US 60/002,223

FILING DATE: 11-AUG-1995

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OM protein - protein search, using sw model

Run on: October 3, 2005, 07:52:54 ; Search time 28 Seconds
(without alignments)
1095.742 Million cell updates/sec

Title: US-10-821-502-4

Perfect score: 2228 1 MDAALLSLLEANCSLALAE.....SIPSPTRISFHSIKOTNAV 411

Sequence: 1 MDAALLSLLEANCSLALAE.....SIPSPTRISFHSIKOTNAV 411

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-Processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA:*
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2228	100.0	411	1 US-08-381-433A-4	Sequence 4, Appl1
2	2228	100.0	411	3 US-08-981-189B-12	Sequence 12, Appl1
3	2228	100.0	411	4 US-09-799-978-18	Sequence 18, Appl1
4	2228	100.0	411	4 US-09-881-401-4	Sequence 4, Appl1
5	2111	94.7	411	4 US-09-631-603-12	Sequence 12, Appl1
6	2106	94.5	411	1 US-08-381-433A-8	Sequence 8, Appl1
7	2106	94.5	411	4 US-09-799-978-10	Sequence 10, Appl1
8	2106	94.5	411	4 US-09-881-401-8	Sequence 8, Appl1
9	2055.5	92.3	431	3 US-08-981-189B-13	Sequence 13, Appl1
10	2055.5	92.3	431	4 US-09-881-401-2	Sequence 2, Appl1
11	2049.5	92.0	431	1 US-08-381-433A-2	Sequence 2, Appl1
12	2042.5	91.7	431	4 US-09-799-978-20	Sequence 20, Appl1
13	2026.5	91.0	431	3 US-08-981-189B-11	Sequence 11, Appl1
14	2026.5	91.0	431	3 US-08-482-746-10	Sequence 10, Appl1
15	2026.5	91.0	431	4 US-09-580-734-10	Sequence 10, Appl1
16	2026.5	91.0	431	4 US-08-374-009-10	Sequence 10, Appl1
17	2026.5	91.0	431	4 US-09-191-724-10	Sequence 10, Appl1
18	2026.5	91.0	431	4 US-09-799-978-24	Sequence 24, Appl1
19	1999	89.7	430	4 US-09-799-978-26	Sequence 26, Appl1
20	1963	88.1	437	4 US-09-799-978-14	Sequence 14, Appl1
21	1962	88.1	438	4 US-09-799-978-12	Sequence 12, Appl1
22	1793	80.5	413	4 US-09-799-978-32	Sequence 32, Appl1
23	1787	80.2	405	4 US-09-799-978-38	Sequence 38, Appl1
24	1593	71.5	420	4 US-09-799-978-42	Sequence 42, Appl1
25	1574	70.6	415	1 US-08-110-286A-2	Sequence 2, Appl1
26	1574	70.6	415	3 US-08-482-746-2	Sequence 2, Appl1
27	1574	70.6	415	4 US-09-580-734-2	Sequence 2, Appl1

28	1574	70.6	415	4 US-08-374-009-2	Sequence 2, Appl1
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30	1574	70.6	415	4 US-09-799-978-2	Sequence 2, Appl1
31	1574	70.6	415	4 US-09-799-978-4	Sequence 4, Appl1
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33	1569	70.4	415	4 US-09-580-734-13	Sequence 13, Appl1
34	1569	70.4	415	4 US-08-374-009-13	Sequence 13, Appl1
35	1569	70.4	415	4 US-08-374-009-13	Sequence 13, Appl1
36	1569	70.4	415	4 US-09-191-724-13	Sequence 13, Appl1
37	1568	70.4	415	4 US-09-826-509-483	Sequence 483, App
38	1563	70.2	415	4 US-09-799-978-30	Sequence 40, Appl1
39	1562	70.1	445	4 US-09-799-978-34	Sequence 34, Appl1
40	1561	70.1	415	1 US-08-110-286A-6	Sequence 6, Appl1
41	1561	70.1	415	3 US-08-981-189B-10	Sequence 10, Appl1
42	1561	70.1	415	3 US-08-482-746-6	Sequence 6, Appl1
43	1561	70.1	415	4 US-09-580-734-6	Sequence 6, Appl1
44	1561	70.1	415	4 US-08-374-009-6	Sequence 6, Appl1
45	1561	70.1	415	4 US-09-191-724-6	Sequence 6, Appl1

ALIGNMENTS

RESULT 1
US-08-381-433A-4
; Sequence 4, Application US/08381433A
; Patent No. 5786203
; GENERAL INFORMATION:
; APPLICANT: Lovenberg, Timothy W.
; APPLICANT: Oltersdorf, Tilman
; APPLICANT: Liaw, Chen
; APPLICANT: Grigoraidis, Dimitri E.
; APPLICANT: Desouza, Eriol B.
; TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: SEED and BERRY
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; City: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/381,433A
; FILING DATE: 31-JAN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: McMaisters, David D.
; REGISTRATION NUMBER: 33,963
; REFERENCE/DOCKET NUMBER: 690068.401C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; TELEX: 3723836 SEEDANDBERRY
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 411 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-381-433A-4
Query Match 100.0%; Score 2228; DB 1; Length 411;
Best Local Similarity 100.0%; Pred. No. 1.3e-205;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db      361 PFNGEVRSLRKRMHMODHHLRVPARAMSIPSPTRISFHSIKOTAAV 411

RESULT 2
US-08-981-189B-12
; Sequence 12, Application US/08981189B
; Patent No. 6214797
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: UROCORTIN PEPTIDES
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FITCH, EVEN, TABIN & FLANNERY
; STREET: 120 S. LaSalle Street, Suite 1600
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60603
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/981,189B
; FILING DATE: 10-DEC-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/028,144
; FILING DATE: 13-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/002,223
; FILING DATE: 11-AUG-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Schumann, James J.
; REGISTRATION NUMBER: 20,856
; REFERENCE/DOCKET NUMBER: 57611
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 858-552-1311
; TELEFAX: 858-552-0095
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 411 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FEATURE:
; NAME/KEY: Protein
; LOCATION: 1..411

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; OTHER INFORMATION: /note= "Rat CRF-R2 Short Form"
; PUBLICATION INFORMATION:
; AUTHORS: Lovenberg, Timothy W
; AUTHORS: Liaw, Chen W
; AUTHORS: Grigoriadis, Dimitri E
; AUTHORS: Clevenger, William
; AUTHORS: Chalmers, Derek T
; AUTHORS: Desouza, Errol B
; TITLE: Cloning and characterization of a
; TITLE: functionally distinct corticotropin-releasing
; TITLE: factor receptor subtype from rat brain
; JOURNAL: Proc. Natl. Acad. Sci. U.S.A.
; VOLUME: 92
; PAGES: 836-840
; DATE: January-1995
; US-08-981-189B-12

Query Match      100.0%; Score 2228; DB 3; Length 411;
Best Local Similarity 100.0%; Pred. No. 1,3e-205;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db      1 MDALLSLLENCGLALAEELLDGMBPDPBPSPYSYCTTLDQIGTCMPQSPAGLV 60
QY      61 ERPCPEYNGIKYNTTRNAVRECLNGTWASRINSHCEPILDDKORKYDLHYRIALIN 120
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QY      121 YLGHCVSVVALVAAPFLFLVLRISIRCLRNVIHWNLIITFFILRNITWFLQLDIDHEVHGN 180
Db      121 YLGHCVSVVALVAAPFLFLVLRISIRCLRNVIHWNLIITFFILRNITWFLQLDIDHEVHGN 180
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Db      121 YLGHCVSVVALVAAPFLFLVLRISIRCLRNVIHWNLIITFFILRNITWFLQLDIDHEVHGN 180
QY      181 EVMGCVTTINYPFVNTNPFMMFVEGCVLHTAIVMTYSTEHRLKMLFIFIGMCI PCPIIV 240
Db      181 EVMGCVTTINYPFVNTNPFMMFVEGCVLHTAIVMTYSTEHRLKMLFIFIGMCI PCPIIV 240
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QY      361 PFNGEVRSLRKRMHMODHHLRVPARAMSIPSPTRISFHSIKOTAAV 411
Db      361 PFNGEVRSLRKRMHMODHHLRVPARAMSIPSPTRISFHSIKOTAAV 411

RESULT 3
US-09-799-978-18
; Sequence 18, Application US/09799978
; Patent No. 6670140
; GENERAL INFORMATION:
; APPLICANT: The Procter & Gamble Company
; APPLICANT: Isfort, Robert
; APPLICANT: Sheldon, Russell
; TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
; TITLE OF INVENTION: Function Using Corticotropin Releasing Factor Receptors
; FILE REFERENCE: 8448
; CURRENT APPLICATION NUMBER: US/09/799,978
; CURRENT FILING DATE: 2001-03-06
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 18
; LENGTH: 411
; TYPE: PRT
; ORGANISM: Rattus norvegicus
; US-09-799-978-18

Query Match      100.0%; Score 2228; DB 4; Length 411;

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Best Local Similarity 100.0%; Pred. No. 1.3e-205;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 MDAAALLSLLEANCSTALAEELLDDGMPDPPEGGPYSCNTTLDIGTCWPOSAGALV 60

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Db 61 ERPCPEYFNGIKYKNTTRNAVRECLNGTWSASRINSHCEPIIDDKORKYDLHYRIALIN 120

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121 YLGHCVSVALVAALFLFLVLSIRCLRVNIHNNLTITFLIRNITWFLQLIDHEVHEGN 180

Db 121 YLGHCVSVALVAALFLFLVLSIRCLRVNIHNNLTITFLIRNITWFLQLIDHEVHEGN 180

QY 181 EWRCRCVTITFNFFVVTNFFMFWVEGCVLHTAIWMTYSTHLRKMLFLFIGWCI PCPIIV 240
181 EWRCRCVTITFNFFVVTNFFMFWVEGCVLHTAIWMTYSTHLRKMLFLFIGWCI PCPIIV 240

Db 181 EWRCRCVTITFNFFVVTNFFMFWVEGCVLHTAIWMTYSTHLRKMLFLFIGWCI PCPIIV 240

QY 241 AMAVGKLYYENECWFGKEPGLVDYIYOGPIILVLLINFLVFNIVIRILMTKLRASTTS 300
241 AMAVGKLYYENECWFGKEPGLVDYIYOGPIILVLLINFLVFNIVIRILMTKLRASTTS 300

Db 241 AMAVGKLYYENECWFGKEPGLVDYIYOGPIILVLLINFLVFNIVIRILMTKLRASTTS 300

QY 301 ETIQYRKAVKATLVLLPLGITYMLFFVNPGEDDSQIVFIYFNSFLQSFGFFVSFYFC 360
301 ETIQYRKAVKATLVLLPLGITYMLFFVNPGEDDSQIVFIYFNSFLQSFGFFVSFYFC 360

Db 301 ETIQYRKAVKATLVLLPLGITYMLFFVNPGEDDSQIVFIYFNSFLQSFGFFVSFYFC 360

QY 361 FENGVEVSALRKRMHMODHALLRVPARAMSIPSPTRISPSHISKOTAAV 411
361 FENGVEVSALRKRMHMODHALLRVPARAMSIPSPTRISPSHISKOTAAV 411

Db 361 FENGVEVSALRKRMHMODHALLRVPARAMSIPSPTRISPSHISKOTAAV 411

RESULT 4
US-09-881-401-4
Sequence 4, Application US/09881401
Patent No. 6723841
GENERAL INFORMATION:
APPLICANT: Lovenberg, Timothy W.
Olcendorff, Tilmann
Liao, Chen
Grigoriadis, Dimitri E.
Chalmers, Derek T.
Desouza, Etrol B.
TITLE OF INVENTION: CORICOTROPIN RELEASING FACTOR 2
RECEPTORS
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Seed Intellectual Property Law Group
STREET: 701 Fifth Avenue, Suite 6300
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent'n Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/881,401
FILING DATE: 13-Jun-2001
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Christensen, William T.
REGISTRATION NUMBER: 44,614
REFERENCE/DOCKET NUMBER: 690068,401C4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 411 amino acids
TYPE: amino acid

TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-881-401-4
Query Match 100.0%; Score 2228; DB 4; Length 411;
Best Local Similarity 100.0%; Pred. No. 1.3e-205;
Matches 411; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MDAAALLSLLEANCSTALAEELLDDGMPDPPEGGPYSCNTTLDIGTCWPOSAGALV 60
1 MDAAALLSLLEANCSTALAEELLDDGMPDPPEGGPYSCNTTLDIGTCWPOSAGALV 60

Db 1 MDAAALLSLLEANCSTALAEELLDDGMPDPPEGGPYSCNTTLDIGTCWPOSAGALV 60

QY 61 ERPCPEYFNGIKYKNTTRNAVRECLNGTWSASRINSHCEPIIDDKORKYDLHYRIALIN 120
61 ERPCPEYFNGIKYKNTTRNAVRECLNGTWSASRINSHCEPIIDDKORKYDLHYRIALIN 120

Db 61 ERPCPEYFNGIKYKNTTRNAVRECLNGTWSASRINSHCEPIIDDKORKYDLHYRIALIN 120

QY 121 YLGHCVSVALVAALFLFLVLSIRCLRVNIHNNLTITFLIRNITWFLQLIDHEVHEGN 180
121 YLGHCVSVALVAALFLFLVLSIRCLRVNIHNNLTITFLIRNITWFLQLIDHEVHEGN 180

Db 121 YLGHCVSVALVAALFLFLVLSIRCLRVNIHNNLTITFLIRNITWFLQLIDHEVHEGN 180

QY 181 EWRCRCVTITFNFFVVTNFFMFWVEGCVLHTAIWMTYSTHLRKMLFLFIGWCI PCPIIV 240
181 EWRCRCVTITFNFFVVTNFFMFWVEGCVLHTAIWMTYSTHLRKMLFLFIGWCI PCPIIV 240

Db 181 EWRCRCVTITFNFFVVTNFFMFWVEGCVLHTAIWMTYSTHLRKMLFLFIGWCI PCPIIV 240

QY 241 AMAVGKLYYENECWFGKEPGLVDYIYOGPIILVLLINFLVFNIVIRILMTKLRASTTS 300
241 AMAVGKLYYENECWFGKEPGLVDYIYOGPIILVLLINFLVFNIVIRILMTKLRASTTS 300

Db 241 AMAVGKLYYENECWFGKEPGLVDYIYOGPIILVLLINFLVFNIVIRILMTKLRASTTS 300

QY 301 ETIQYRKAVKATLVLLPLGITYMLFFVNPGEDDSQIVFIYFNSFLQSFGFFVSFYFC 360
301 ETIQYRKAVKATLVLLPLGITYMLFFVNPGEDDSQIVFIYFNSFLQSFGFFVSFYFC 360

Db 301 ETIQYRKAVKATLVLLPLGITYMLFFVNPGEDDSQIVFIYFNSFLQSFGFFVSFYFC 360

QY 361 FENGVEVSALRKRMHMODHALLRVPARAMSIPSPTRISPSHISKOTAAV 411
361 FENGVEVSALRKRMHMODHALLRVPARAMSIPSPTRISPSHISKOTAAV 411

Db 361 FENGVEVSALRKRMHMODHALLRVPARAMSIPSPTRISPSHISKOTAAV 411

RESULT 5
US-09-631-603-12
Sequence 12, Application US/09631603
Patent No. 6733990
GENERAL INFORMATION:
APPLICANT: Hodge, Martin R.
APPLICANT: Lloyd, Claire
APPLICANT: Welch, Nadine
TITLE OF INVENTION: 15771, A NO. 6733990e1 GPCR-like Molecule of the
FILR REFERENCE: 5800-48A
CURRENT APPLICATION NUMBER: US/09/631,603
FILER REFERENCE: 5800-48A
CURRENT FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: 09/515,781
PRIOR FILING DATE: 2000-02-29
PRIOR APPLICATION NUMBER: 60/146,916
PRIOR FILING DATE: 2000-08-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 12
LENGTH: 411
TYPE: PRT
ORGANISM: Homo sapiens
US-09-631-603-12

Query Match 94.7%; Score 2111; DB 4; Length 411;
Best Local Similarity 93.9%; Pred. No. 2.3e-194;
Matches 386; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 1 MDAAALLSLLEANCSTALAEELLDDGMPDPPEGGPYSCNTTLDIGTCWPOSAGALV 60
1 MDAAALLSLLEANCSTALAEELLDDGMPDPPEGGPYSCNTTLDIGTCWPOSAGALV 60

Db 1 MDAAALLSLLEANCSTALAEELLDDGMPDPPEGGPYSCNTTLDIGTCWPOSAGALV 60

QY 61 ERPCPEYFNGIKYKNTTRNAVRECLNGTWSASRINSHCEPIIDDKORKYDLHYRIALIN 120
61 ERPCPEYFNGIKYKNTTRNAVRECLNGTWSASRINSHCEPIIDDKORKYDLHYRIALIN 120

Db 61 ERPCEYENGKYNVTRNAARECLNENGTWASKINYSOCEPIIDKORXYDHYRIALVYN 120
QY 121 YLGHCVSVALVAAPFLFLVLRISIRCLRNVIHWNLTITFIIRNITWFLQLIDHEVHSGN 180
Db 121 YLGHCVSVALVAAPFLFLALRSIRCLRNVIHWNLTITFIIRNVMWFLQLVDHEVHSGN 180
QY 181 EWMGCVTITINYPVNTNFMMFVGGCYLHTAIWNTYSTELRKMLFLFIGMCIPFPIIV 240
Db 181 EWMGCVTITINYPVNTNFMMFVGGCYLHTAIWNTYSTELRKMLFLFIGMCIPFPIIV 240
QY 241 AMAVGKLYYENQOCFGEKPGDLVDYIYOGPIILVLLINPFLNIVIRIIMTKLRASSTS 300
Db 241 AMAVGKLYYENQOCFGEKPGDLVDYIYOGPIILVLLINPFLNIVIRIIMTKLRASSTS 300
QY 301 ETIOYRKAVKATLVLLPLGITTYMLFVNPGEDDLSQLVFYFNSFLOSFGGFVSVFYC 360
Db 301 ETIOYRKAVKATLVLLPLGITTYMLFVNPGEDDLSQLVFYFNSFLOSFGGFVSVFYC 360
QY 361 FPNGEVRSALRKRMHMODHSLRPVAPARASIPSPTRISFHSIKOTAAV 411
Db 361 FPNGEVRSALRKRMHMODHSLRPVAPARASIPSPTRISFHSIKOTAAV 411

RESULT 6
US-08-381-433A-8
; Sequence 8, Application US/08381433A
; Patent No. 5786203
; GENERAL INFORMATION:
; APPLICANT: Lovenberg, Timothy W.
; APPLICANT: Oltersdorf, Tilmann
; APPLICANT: Liaw, Chen
; APPLICANT: Grigoridis, Dimitri E.
; APPLICANT: Desouza, Erol B.
; TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2
; TITLE OF INVENTION: RECEPTORS
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/381,433A
; FILING DATE: 31-JAN-1995
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: McMaesters, David D.
; REGISTRATION NUMBER: 33,963
; REFERENCE/DOCKET NUMBER: 690068.401C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; TELEX: 3723836 SEDANDBERRY
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 411 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-381-433A-8

Query Match 94.5%; Score 2106; DB 1; Length 411;
Best Local Similarity 93.7%; Pred. No. 7e-194;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
QY 1 MDAALLSLLEANCSLALAEELLLDGWPDPBPSPSYCNTTLDIGTCWPOSAGALV 60

Db 1 MDAALLSLLEANCSLALAEELLLDGWPDPBPSPSYCNTTLDIGTCWPOSAGALV 60
QY 61 ERPCEYENGKYNVTRNAARECLNENGTWASKINYSOCEPIIDKORXYDHYRIALVYN 120
Db 61 ERPCEYENGKYNVTRNAARECLNENGTWASKINYSOCEPIIDKORXYDHYRIALVYN 120
QY 121 YLGHCVSVALVAAPFLFLVLRISIRCLRNVIHWNLTITFIIRNITWFLQLIDHEVHSGN 180
Db 121 YLGHCVSVALVAAPFLFLALRSIRCLRNVIHWNLTITFIIRNVMWFLQLVDHEVHSGN 180
QY 181 EWMGCVTITINYPVNTNFMMFVGGCYLHTAIWNTYSTELRKMLFLFIGMCIPFPIIV 240
Db 181 EWMGCVTITINYPVNTNFMMFVGGCYLHTAIWNTYSTELRKMLFLFIGMCIPFPIIV 240
QY 241 AMAVGKLYYENQOCFGEKPGDLVDYIYOGPIILVLLINPFLNIVIRIIMTKLRASSTS 300
Db 241 AMAVGKLYYENQOCFGEKPGDLVDYIYOGPIILVLLINPFLNIVIRIIMTKLRASSTS 300
QY 301 ETIOYRKAVKATLVLLPLGITTYMLFVNPGEDDLSQLVFYFNSFLOSFGGFVSVFYC 360
Db 301 ETIOYRKAVKATLVLLPLGITTYMLFVNPGEDDLSQLVFYFNSFLOSFGGFVSVFYC 360
QY 361 FPNGEVRSALRKRMHMODHSLRPVAPARASIPSPTRISFHSIKOTAAV 411
Db 361 FPNGEVRSALRKRMHMODHSLRPVAPARASIPSPTRISFHSIKOTAAV 411

RESULT 7
US-09-799-978-10
; Sequence 10, Application US/09799978
; Patent No. 6670140
; GENERAL INFORMATION:
; APPLICANT: The Procter & Gamble Company
; APPLICANT: Isifort, Robert
; APPLICANT: Sheldon, Russell
; TITLE OF INVENTION: Methods for Identifying Compounds for Regulating Muscle Mass or
; TITLE OF INVENTION: Function Using Corticotropin Releasing Factor Receptors
; FILE REFERENCE: 8448
; CURRENT APPLICATION NUMBER: US/09/799,978
; CURRENT FILING DATE: 2001-03-06
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 10
; LENGTH: 411
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-799-978-10

Query Match 94.5%; Score 2106; DB 4; Length 411;
Best Local Similarity 93.7%; Pred. No. 7e-194;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;
QY 1 MDAALLSLLEANCSLALAEELLLDGWPDPBPSPSYCNTTLDIGTCWPOSAGALV 60
Db 1 MDAALLSLLEANCSLALAEELLLDGWPDPBPSPSYCNTTLDIGTCWPOSAGALV 60
QY 61 ERPCEYENGKYNVTRNAARECLNENGTWASKINYSOCEPIIDKORXYDHYRIALVYN 120
Db 61 ERPCEYENGKYNVTRNAARECLNENGTWASKINYSOCEPIIDKORXYDHYRIALVYN 120
QY 121 YLGHCVSVALVAAPFLFLVLRISIRCLRNVIHWNLTITFIIRNITWFLQLIDHEVHSGN 180
Db 121 YLGHCVSVALVAAPFLFLALRSIRCLRNVIHWNLTITFIIRNVMWFLQLVDHEVHSGN 180
QY 181 EWMGCVTITINYPVNTNFMMFVGGCYLHTAIWNTYSTELRKMLFLFIGMCIPFPIIV 240
Db 181 EWMGCVTITINYPVNTNFMMFVGGCYLHTAIWNTYSTELRKMLFLFIGMCIPFPIIV 240
QY 241 AMAVGKLYYENQOCFGEKPGDLVDYIYOGPIILVLLINPFLNIVIRIIMTKLRASSTS 300
Db 241 AMAVGKLYYENQOCFGEKPGDLVDYIYOGPIILVLLINPFLNIVIRIIMTKLRASSTS 300

QY 301 ETIQKAVKATVLLPLIGITYMLFVNPGEDDLSQIVFIYNSFLQSFQGFVSVFYC 360
DB 301 ETIQKAVKATVLLPLIGITYMLFVNPGEDDLSQIMFIYNSFLQSFQGFVSVFYC 360
QY 361 FPNGEVRSALRRKMRHMODHSLRVPVARSIPSPTRISPHSIKQTAUV 411
DB 361 FPNGEVRSALRRKMRHMODHSLRVPVARSIPSPTRISPHSIKQTAUV 411

RESULT 8

US-09-881-401-8
Sequence 8, Application US/09881401
Patent No. 6723841
GENERAL INFORMATION:
APPLICANT: Lovenberg, Timothy W.
Olbersdorf, Tilman
Lilaw, Chen
Grigoriadis, Dimitri E.
Desouza, Errol B.
Chalmers, Derek T.
TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2
RECEPTORS
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed Intellectual Property Law Group
STREET: 701 Fifth Avenue, Suite 6300
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/881,401
FILING DATE: 13-Jun-2001
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Christensen, William T.
REGISTRATION NUMBER: 44,614
REFERENCE/DOCKET NUMBER: 690068.401C4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 411 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 8:
US-09-881-401-8

Query Match 94.5%; Score 2106; DB 4; Length 411;
Best Local Similarity 93.7%; Pred. No. 7e-194;
Matches 385; Conservative 13; Mismatches 13; Indels 0; Gaps 0;

QY 1 MDALLSLLEANSCLAEELLDDGMPPEGGYSYCNLTLDIGTCWPSAGALV 60
DB 1 MDALLSLLEANSCLAEELLDDGMPPEGGYSYCNLTLDIGTCWPSAGALV 60
QY 61 ERPCPEYFGKIKNTNRNAVRECLENGWASRINYHCEPIIDDKKRYDHLRIALIN 120
DB 61 ERPCPEYFGKIKNTNRNAVRECLENGWASRINYHCEPIIDDKKRYDHLRIALIN 120
QY 121 YGHCYSVALVAAPFLPLVLSIRCLRVNIHWNLTITFLRNITWFLQLIDHEVEHGN 180
DB 121 YGHCYSVALVAAPFLPLVLSIRCLRVNIHWNLTITFLRNITWFLQLIDHEVEHGN 180
QY 181 EWCRCVTITFNFTNFPMFVEGCYHTAIWMTYSTEHARKMLFLPGWCIPPIIV 240
DB 181 EWCRCVTITFNFTNFPMFVEGCYHTAIWMTYSTEHARKMLFLPGWCIPPIIV 240

DB 181 EWCRCVTITFNFTNFPMFVEGCYHTAIWMTYSTEHARKMLFLPGWCIPPIIV 240
QY 241 AAAGKLYENQCEWKEKPGDLVDYIYOGPIILVLLINFVLENIIVRIIMTLKRASTTS 300
DB 241 AAAGKLYENQCEWKEKPGDLVDYIYOGPIILVLLINFVLENIIVRIIMTLKRASTTS 300
QY 301 ETIQKAVKATVLLPLIGITYMLFVNPGEDDLSQIVFIYNSFLQSFQGFVSVFYC 360
DB 301 ETIQKAVKATVLLPLIGITYMLFVNPGEDDLSQIMFIYNSFLQSFQGFVSVFYC 360
QY 361 FPNGEVRSALRRKMRHMODHSLRVPVARSIPSPTRISPHSIKQTAUV 411
DB 361 FPNGEVRSALRRKMRHMODHSLRVPVARSIPSPTRISPHSIKQTAUV 411

RESULT 9

US-08-981-189B-13
Sequence 13, Application US/08981189B
Patent No. 6214797
GENERAL INFORMATION:
APPLICANT:
TITLE OF INVENTION: UROCORTIN PEPTIDES
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: FITCH, EVEN, TABIN & FLANNERY
STREET: 120 S. LaSalle Street, Suite 1600
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60603
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/981,189B
FILING DATE: 10-DEC-1997
Prior APPLICATION DATA:
APPLICATION NUMBER: US 60/028,144
FILING DATE: 13-JUN-1995
Prior APPLICATION DATA:
APPLICATION NUMBER: US 60/002,223
FILING DATE: 11-AUG-1995
ATTORNEY/AGENT INFORMATION:
NAME: Schumann, James J.
REGISTRATION NUMBER: 20,856
REFERENCE/DOCKET NUMBER: 57611
TELECOMMUNICATION INFORMATION:
TELEPHONE: 858-552-1311
TELEFAX: 858-552-0095
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY: Protein
LOCATION: 1..431
OTHER INFORMATION: /note="Rat CRF-R2 Long Form"
PUBLICATION INFORMATION:
AUTHORS: Lovenberg, Timothy W
AUTHORS: Lilaw, Chen W
AUTHORS: Grigoriadis, Dimitri E
AUTHORS: Cleveland, William
AUTHORS: Chalmers, Derek T
AUTHORS: Desouza, Errol B
AUTHORS: Olbersdorf, Tilman
TITLE: Cloning and characterization of a
TITLE: functionally distinct corticotropin-releasing
TITLE: factor receptor subtype from rat brain
JOURNAL: Proc. Natl. Acad. Sci. U.S.A.

VOLUME: 92
PAGES: 836-840
DATE: January-1995
US-08-981-189B-13

Query Match 92.3%; Score 205.5; DB 3; Length 431;

Best Local Similarity 94.1%; Pred. No. 5.3e-189; Matches 382; Conservative 1; Mismatches 12; Indels 11; Gaps 1;

QY 6 LLSLEANCSTALAEELLDGMBPDPPEGPPSYCNTTLDIGTCWPOSAGALVERPCP 65
DB 37 LMTLEQYCHRTTNNF-----SGPYSCNTTLDIGTCWPOSAGALVERPCP 85
QY 66 EYFNGIKYNTTRNAVRECLNGTWSARINYSHCEPILDDKORKYDLHYRIALIINYLGHC 125
DB 86 EYFNGIKYNTTRNAVRECLNGTWSARINYSHCEPILDDKORKYDLHYRIALIINYLGHC 145
QY 126 VSVVALVAAPFLFLVLRISIRCLRNVIHWNLTFTFLRNITWFLQLIDHEVHEGNEVWCR 185
DB 146 VSVVALVAAPFLFLVLRISIRCLRNVIHWNLTFTFLRNITWFLQLIDHEVHEGNEVWCR 205
QY 186 CVTTIFNFVVTNPFPMFVEGCGYLHTAIVMTYSTELRKMLFLFGWCIPCP1IYAMAVG 245
DB 206 CVTTIFNFVVTNPFPMFVEGCGYLHTAIVMTYSTELRKMLFLFGWCIPCP1IYAMAVG 265
QY 246 KLYYNEQCGWKEPBGDLVDYIYQGP1ILVLLINFVFLFNIVRIIMTKLRASSTSETIOY 305
DB 266 KLYYNEQCGWKEPBGDLVDYIYQGP1ILVLLINFVFLFNIVRIIMTKLRASSTSETIOY 325
QY 306 RKAVALTVLPLLGITWMLFFVNPGEDLSQIVFIYNSFLQSGFVSVFYCFENG 365
DB 326 RKAVALTVLPLLGITWMLFFVNPGEDLSQIVFIYNSFLQSGFVSVFYCFENG 385
QY 366 VRSALRKXMRHMODHHLRVPARAMSIPSPTRISFHSIKOTAAV 411
DB 386 VRSALRKXMRHMODHHLRVPARAMSIPSPTRISFHSIKOTAAV 431

RESULT 10

US-09-881-401-2
Sequence 2, Application US/09881401

Patent No. 6723841
GENERAL INFORMATION:

APPLICANT: Lovenberg, Timothy W.

Olterdorf, Tilman

Grigoriadis, Dimitri E.

Chalmers, Derek T.

Desouza, Erol B.

TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2

RECEPTORS

NUMBER OF SEQUENCES: 8

CORRESPONDENCE ADDRESS:

ADDRESSER: Seed Intellectual Property Law Group

CITY: Seattle

STATE: Washington

COUNTRY: USA

ZIP: 98104-7092

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/881,401

FILING DATE: 13-Jun-2001

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Christiansen, William T.

REGISTRATION NUMBER: 44,614

REFERENCE/DOCKET NUMBER: 690068,401C4

TELECOMMUNICATION INFORMATION:

TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 431 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-881-401-2

Query Match 92.3%; Score 205.5; DB 4; Length 431;

Best Local Similarity 94.1%; Pred. No. 5.3e-189; Matches 382; Conservative 1; Mismatches 12; Indels 11; Gaps 1;

QY 6 LLSLEANCSTALAEELLDGMBPDPPEGPPSYCNTTLDIGTCWPOSAGALVERPCP 65
DB 37 LMTLEQYCHRTTNNF-----SGPYSCNTTLDIGTCWPOSAGALVERPCP 85
QY 66 EYFNGIKYNTTRNAVRECLNGTWSARINYSHCEPILDDKORKYDLHYRIALIINYLGHC 125
DB 86 EYFNGIKYNTTRNAVRECLNGTWSARINYSHCEPILDDKORKYDLHYRIALIINYLGHC 145
QY 126 VSVVALVAAPFLFLVLRISIRCLRNVIHWNLTFTFLRNITWFLQLIDHEVHEGNEVWCR 185
DB 146 VSVVALVAAPFLFLVLRISIRCLRNVIHWNLTFTFLRNITWFLQLIDHEVHEGNEVWCR 205
QY 186 CVTTIFNFVVTNPFPMFVEGCGYLHTAIVMTYSTELRKMLFLFGWCIPCP1IYAMAVG 245
DB 206 CVTTIFNFVVTNPFPMFVEGCGYLHTAIVMTYSTELRKMLFLFGWCIPCP1IYAMAVG 265
QY 246 KLYYNEQCGWKEPBGDLVDYIYQGP1ILVLLINFVFLFNIVRIIMTKLRASSTSETIOY 305
DB 266 KLYYNEQCGWKEPBGDLVDYIYQGP1ILVLLINFVFLFNIVRIIMTKLRASSTSETIOY 325
QY 306 RKAVALTVLPLLGITWMLFFVNPGEDLSQIVFIYNSFLQSGFVSVFYCFENG 365
DB 326 RKAVALTVLPLLGITWMLFFVNPGEDLSQIVFIYNSFLQSGFVSVFYCFENG 385
QY 366 VRSALRKXMRHMODHHLRVPARAMSIPSPTRISFHSIKOTAAV 411
DB 386 VRSALRKXMRHMODHHLRVPARAMSIPSPTRISFHSIKOTAAV 431

RESULT 11

US-08-381-433A-2
Sequence 2, Application US/08381433A

Patent No. 5786203
GENERAL INFORMATION:

APPLICANT: Lovenberg, Timothy W.

Olterdorf, Tilman

Grigoriadis, Dimitri E.

Chalmers, Derek T.

Desouza, Erol B.

TITLE OF INVENTION: CORTICOTROPIN RELEASING FACTOR 2

RECEPTORS

NUMBER OF SEQUENCES: 8

CORRESPONDENCE ADDRESS:

ADDRESSER: SEED and BERRY

CITY: Seattle

STATE: Washington

COUNTRY: USA

ZIP: 98104-7092

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/381,433A

FILING DATE: 31-JAN-1995

CLASSIFICATION: 435


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; PRIOR APPLICATION NUMBER: 09/191,724
; PRIOR FILING DATE: 1998-11-12
; PRIOR APPLICATION NUMBER: US 08/374,009
; PRIOR FILING DATE: 1995-01-17
; PRIOR APPLICATION NUMBER: US 08/353,537
; PRIOR FILING DATE: 1994-12-09
; PRIOR APPLICATION NUMBER: PCT/US94/05908
; PRIOR FILING DATE: 1993-05-25
; PRIOR APPLICATION NUMBER: US 08/110,286
; PRIOR FILING DATE: 1993-08-23
; PRIOR APPLICATION NUMBER: US 08/079,320
; PRIOR FILING DATE: 1993-06-18
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 431
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-580-734-10

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Query Match 91.0%; Score 2026.5; DB 4; Length 431;
 Best Local Similarity 87.9%; Pred. No. 3.2e-186;
 Matches 376; Conservative 12; Mismatches 15; Indels 25; Gaps 2;

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DB 64 LQDIGCWPQASAPGALVERPCPEYFNGIKYNTTRNAVRECLENGWTASRINTSHCEPIID 123
QY 104 DKQKKYDLHYRIALILINYGHCVSVALVAALFLFLVLSIRCLRNVIHMNLITTFILRN 163
DB 124 DKQKKYDLHYRIALILINYGHCVSVALVAALFLFLVLSIRCLRNVIHMNLITTFILRN 183
QY 164 ITWFLIQLIDHEVHEGNEVWCRCVTTIFNYFVVTNFFMMFVEGCVLHTAIWMTYSTELR 223
DB 184 IAMPFLIQLIDHEVHEGNEVWCRCVTTIFNYFVVTNFFMMFVEGCVLHTAIWMTYSTELR 243
QY 224 KKLFLFIGICPCPIIVANAAGKLYENRCWFGKEPGDLVDYIYOGPIILVILLINFPVL 283
DB 244 KKLFLFIGICPCPIILIAVAGKLYENRCWFGKEAGDLVDYIYOGPVLVILLINFPVL 303
QY 284 FNIIVRLMTKLRASSTSETIOYRKAVKATLVLLPLGITMYMLFVNPGEDDLISQIVFIYF 343
DB 304 FNIIVRLMTKLRASSTSETIOYRKAVKATLVLLPLGITMYMLFVNPGEDDLISQIVFIYF 363
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QY 404 SIKQTAAY 411
DB 424 SIKQTAAY 431

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